Microsoft

The Accessible and Inclusive Workplace Handbook

March 2024

Our mission

"Empower every person and every organization on the planet to achieve more."

Introduction

Designing workplaces for everyone

This document describes good practice to create accessible and inclusive environments. It is our responsibility as designers to know how our designs affect interactions and create mismatches in the workplace.

Understanding these mismatches in employee experience highlights opportunities to create solutions with utility and elegance for many people.

Human beings have amazing capabilities to adapt to different situations, and understanding those adaptations is the key to real insight.

Introduction

Why it matters

Designing for all building users opens our products and experiences to the most people with the widest range of abilities and acknowledges how people really are.

As humans we are growing, changing, and adapting to the world around us every day. We want our designs to reflect and support that diversity.

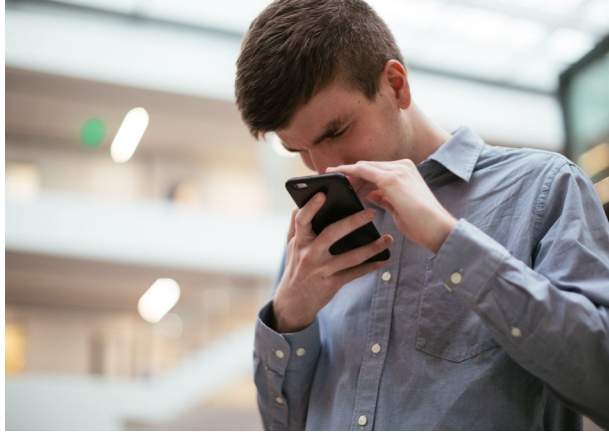
Introduction

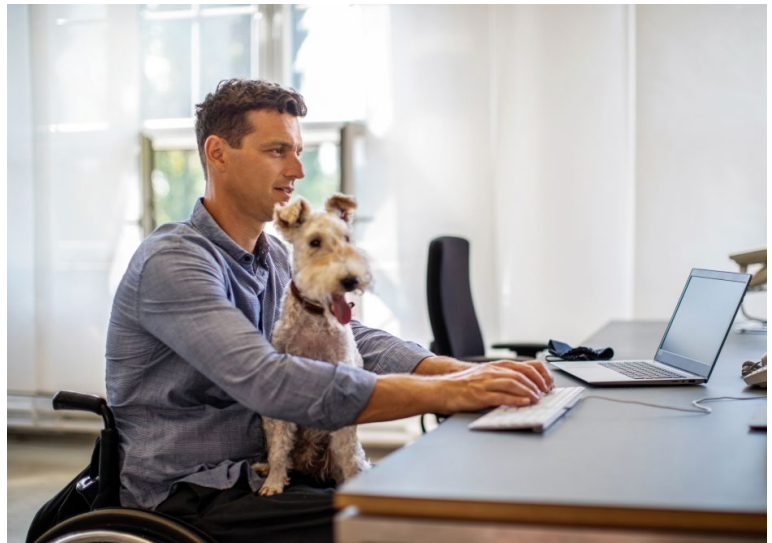
Re-defining Disability

Until recently, disability was defined as the result of an individual's condition. The limitation was associated with the person, not the environment.

Today we know that **disability occurs at the point of interaction between a person and an inaccessible environment**. Physical, cognitive, and social exclusion are the result of a mismatch between what a person wants to achieve and an environment that does not support them.

This definition, first adopted by the **World Health Organization**, presents us with an unprecedented design, business and social opportunity.





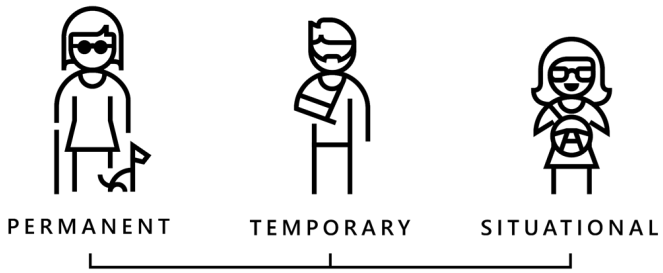
Introduction

Disability will affect everyone!

Everyone will experience a disability at some point in their lives. A disability can be acquired gradually or rapidly and can be a **permanent, temporary** or **situational** condition.

A temporary disability might be a broken leg or arm.

A situational disability might be a person using a buggy up or down stairs or someone struggling to hear a conversation in a noisy environment.



Introduction

Physical disabilities

These principles in this document address the following range of abilities with solutions that address our greatest opportunities.

Mobility: person who uses a wheelchair or other mobility aid, has limited dexterity.

Vision: person who is blind, person with low vision, a person who is color blind. (an Inability or the difficulty for a person / persons to distinguish between certain colors).

Hearing: person who is deaf, person with hearing loss.

Speech: person who is non-verbal, person with a stutter, a person with Developmental Language Disorder.

Introduction

Not every disability is visible!

Additionally, we recognize **cognitive, neural,** and **mental** disabilities by providing a choice of settings that can adapt flexibly through specialized solutions, services and technologies. By designing for **neurodiversity**, we can ensure we are offering the best working environments for all employees.

Cognitive: person with a cognitive or developmental disability.

Neural: person with autism, person with dyslexia, dyscalculia, dyspraxia, or dysgraphia, person with Attention Deficit Hyperactivity Disorder (ADHD), a person with Sensory Processing Disorder, a person with Tourette Syndrome, a person with Obsessive Compulsive Disorder.

Mental: personal with PTSD, people living with bipolar disorder, anxiety and/or depression.

Note: This is not an exhaustive list.

Introduction

Understanding Neurodiversity

Neurodiversity is the term used to describe the **infinite variation** in human neurocognitive function.

Neurodiversity recognizes that the way we process and perceive information, speak, think, move, act, and learn varies from person to person. Neurological processing can also change over time due to factors such as brain injury, trauma, disease, or a change in mental health.

“There is no standard brain.”

Thomas Armstrong PhD, The Power of Neurodiversity

It is common for people to have more than one neurodivergent trait which means it can be difficult to diagnose a specific condition.

Neurological profiles are sometimes grouped as:

Neurotypical – a condition in which a person who has neurological processes and responses that are similar to what is typically found in the general population (around 80-85% of people)

Neurodivergent – a condition in which a person has neurological processes and responses that differ from what is typically found in the general population (around 15-20% of people)

Neurodegenerative – a condition in which a person experiences sensory processing variations that develop gradually through brain diseases such as dementia or Parkinson’s.

This guide looks at ways to design for inclusion for all.

Introduction

Neurodiversity and the environment

People who are neurodivergent often experience challenges with sensory processing in the built environment. There are several key factors of the workplace environment that can have impact;

Sounds - loud, quiet, intermittent, unexpected, continuous.

Visual noise - intense light, glare, shadows, vibrant colors, patterns, movement, technology, or clutter.

Layout and spatial arrangements - lack of transitions, conflicting adjacencies, too open or too constricting, convoluted or inadequately marked circulation.

Unpleasant sensory inputs from smell, touch, taste, or temperature.

These factors can contribute to anxiety, fatigue, sensory shut-down, behavior/mood changes and/or poor mental health.

Introduction

Why we design for Accessibility and Inclusion.

By providing accessible and inclusive workplaces Microsoft:

1. Continues to attract a diverse workforce
2. Continues to ensure good employee retention
3. Reduces absence due to poor mental health
4. Improves employee wellbeing and performance
5. Provides an environment where people can feel empowered and in control - Keeping in-line with our mission to **“empower every person”.**

Good Practice for Accessible Design

"Nothing about us without us!"

Partnership is important for good design. This slogan adopted by the disability rights community in the 1990's communicates the idea that no policy should be decided by any representative without the full and direct participation of members of the group(s) affected by that policy.

Good Practice for Accessible Design

Space planning

Building layouts should be designed to give a clear understanding and provide a logical sequence of activities.

Allow for greater circulation space and clearances for the largest mobility aids at **25%** of workstation positions within a team space, touchdown area or neighborhood.

Provide **67”(1700mm)** minimum for primary paths of travel and all enclosed rooms should accommodate a **67”(1700mm)** turning circle.

2010 ADA Standards for Accessible Design requirements should be referred to for all counter heights and depths, including correct knee and toe clearances. Minimum clearances for side access approach should also be met.

See “Useful Diagrams – D1-02-Toe and knee clearance”

Allow for **36”(915mm)** minimum circulation around furniture settings.

Top – Microsoft Hillsboro
Bottom – Microsoft 901K

Good Practice for Accessible Design

Accessible reach

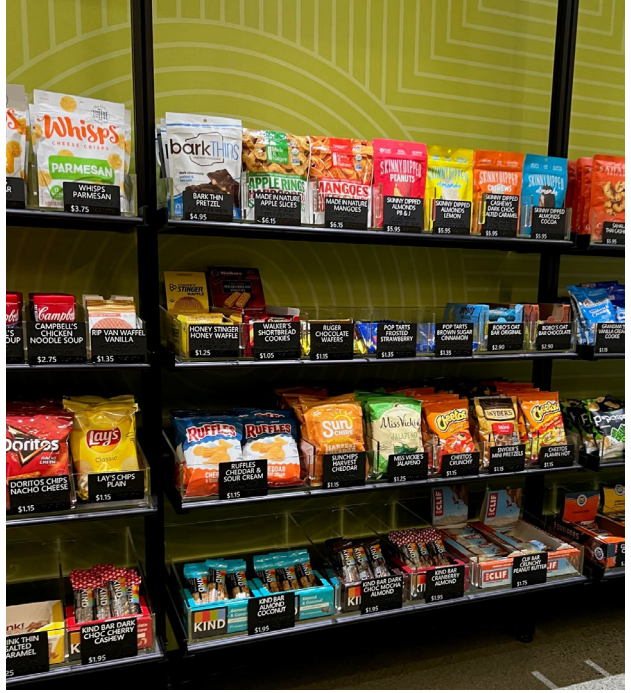
All wall mounted items, controls, buttons, etc. should be within reach range **36”- 48”(915mm-1220mm).**

Adopt a vertical shelf stocking approach. By providing the same items at both a lower and higher shelf, supplies are in reach of both persons of taller and shorter stature or in wheelchairs. All elements should have a quantity stocked within accessible reach range **15”- 48”(380mm – 1220mm)**.

Mount all touch screens or departure screens on a height adjustable wall bracket so all users can adjust and access comfortably. Add handle to the bottom of the frame so people know how it moves.

All writable surfaces are mounted no higher than **34”(860mm)** above floor level.

Any controls or wall mounted items such as switches, accessories, dispensers, hand dryers, shelves, hooks etc. do not protrude more than **4"(100 mm)** from the wall unless they have wing walls, are in a niche, or have a counter below.



Top Images – Microsoft East Campus
Bottom – Microsoft Seoul

Good Practice for Accessible Design

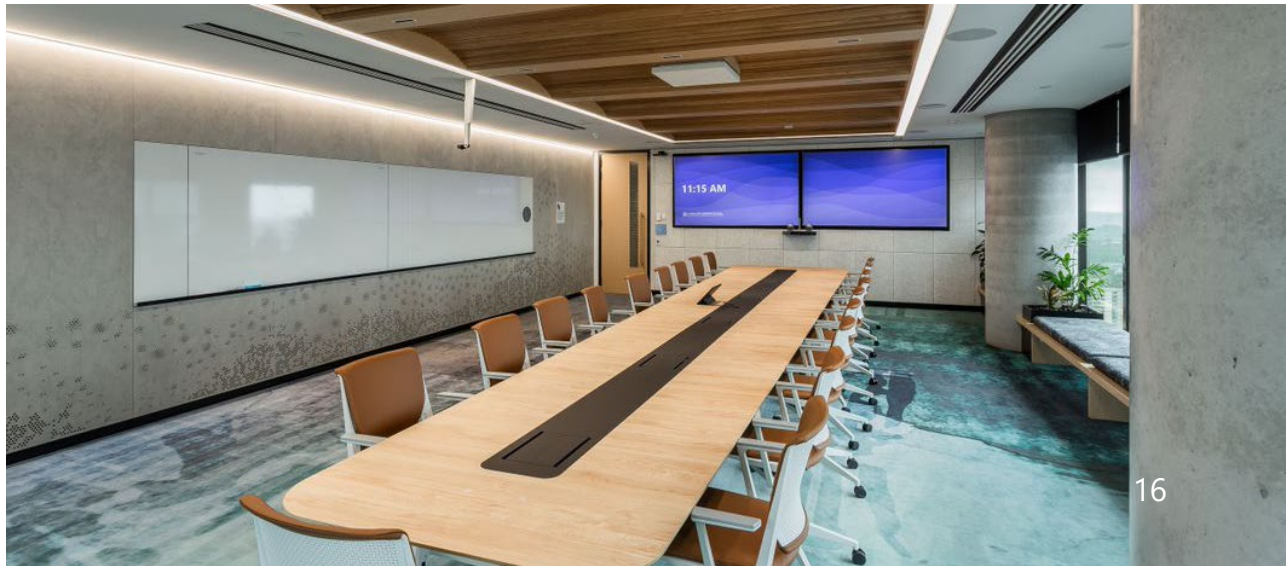
Furniture and fittings

Provide a variety of diverse seating types in hubs and lounge areas to accommodate a diverse range of body types. Arm rests are useful to aid standing from sitting, include them on a third of seats. Include tables with a variety of heights that serve different purposes.

Ensure dining and meeting tables allow for the required knee and toe clearances and avoid tables with wide pedestals that might prevent a wheelchair user pulling under the tabletop.

Consider those without digits or who have limited dexterity when specifying door handles or any operable parts. U shaped pulls and level handles are best, or any other that does not require finger grip, pinching, tight grasping or twisting of the wrist. This includes toilet partitions.

When providing tabletop power ensure it is within **24”(610mm)** reach from the table edge.



Top – Microsoft One Esterra
Bottom – Microsoft Sydney

Good Practice for Accessible Design

Doors

People with mobility or vision disabilities can find doors a major obstacle to accessing buildings and spaces. The best solution for entrance doors are glazed doors with decals on glass for users with low vision.

Provide automatic opening at all main and accessible entrances, allowing sufficient time for user to operate mechanism and then navigate through door.

Ensure door opening motor is sufficient for high wind locations. Automatic door openers are required in all high traffic areas, cafes, restrooms, and parking garages.

Installing vertical actuators to open doors allows users to operate mechanism with their foot or mobility device. Identify optimum places for installation for practical use.

Ensure that doors require minimal force to open.

Good Practice for Accessible Design

The power of contrast

Applying color contrast intentionally throughout the design provides a powerful tool for those with low vision or blindness to navigate their surroundings and map the layout of a room more clearly. Emphasize contrast at main touchpoints such as receptions and kitchenettes.

Make internal doors and openings distinctive by providing **30-point light reflectance value (LRV)** color contrast surround to the door.

Contrast furniture and seating pads with flooring and use color contrast to highlight power outlets and controls.

Provide decals on glazed doors and partitions which contrast with background colors seen through the glass in all light levels.

Whilst using contrast to highlight some areas, avoid high contrast repetitive patterns on walls or floors as these can create visual illusions for some.

Top – Microsoft Edmonton
Bottom Left Image – Microsoft Shinagawa
Bottom Right Image – Microsoft Malta Skyparks

Good Practice for Accessible Design

Sound and lighting

Consider the materials specified and how they can affect noise and acoustics of a space. Avoid using too many hard materials in spaces.

Where stairs are used frequently design for tread finish that will dampen footfall.

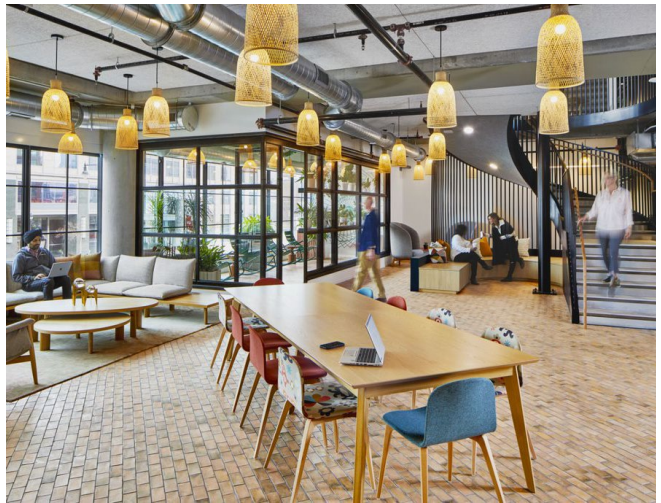
Microsoft has a range of acoustic standards to best support each space type designed. These help eliminate spaces with echoes. Wherever possible minimize sounds from equipment and services. Work with facilities teams to specify the quietest equipment possible.

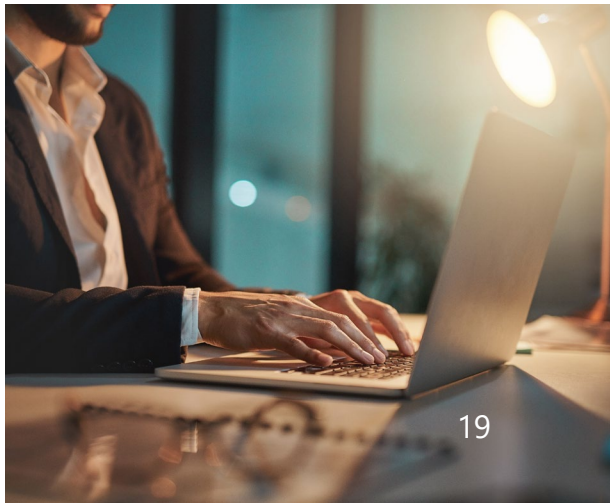
Microsoft has a range of lighting standards to best support function and use in the different space types. This ensures suitably lit spaces that aid with lip reading, sign language and the functions to be carried out in the space.

No fluorescent lighting.

Intentionally design lighting to ensure there is no glare or excessive contrast between bright and ambiently lit spaces.

Provide adjustable and dimmable tasks lights at all workstations.





Top – Microsoft Zurich Talstrasse
Bottom Left Image – Microsoft Atlanta

Good Practice for Accessible Design

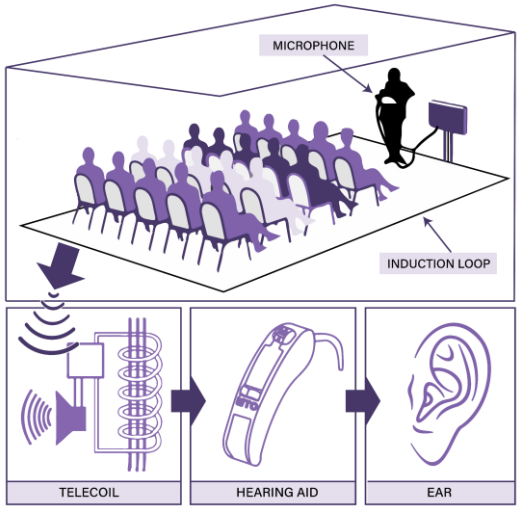
AV and services

Involve everyone in the conversation.

Provide audio and closed captioning for all visual presentations and TTY/closed captioning for all audio presentations.

Include assistive listening device capability for minimum **5%** of conference rooms. Provide technology that enhances or at a minimum, doesn't interfere with hearing aid equipment.

Provide permanently installed audible and visible alarms and visual or audible announcement warnings prior to loud alarms.



Good Practice for Accessible Design

Building approach

Any level changes, however small, provide a barrier to anyone with a mobility disability. Ensure paths provided are non-skid, stable surfaces. Provide curb ramps and curb cuts with truncated domes to alert level change

Minimum clearance along path of travel is **44”(1120mm).** Where space allows provide **72”(1828mm)** to allow for two wheelchairs or motorized scooters simultaneously.

Where a change of direction is required provide turning radii of **83”(2110mm)** to accommodate people using power chairs. Provide rest locations adjacent to path of travel every **98 feet (28 meters).**

Paths of travel should have contrasting, tactilely distinct edge detail and be well lit with downward directed light to avoid creating glare for those of shorter stature.

Provide the lowest slopes possible **(1:20 or less).** Where required provide ramps **(maximum gradient 1:12)** that have been thoughtfully integrated into the landscape design with building code compliant accessible handrails and tactile indicators at landings and top of ramp.

Microsoft East Campus – Building 5 and 6
©Tim Griffith

Good Practice for Accessible Design

Welcome lobby

Provide a dry, weather protected place near the entrance but outside the path of travel for someone to stop and familiarize themselves with the lobby.

Barrier matting must be recessed to provide level transition. Choose similar colors for flooring types to create a seamless transition. Provide carpet around reception and touch points to aid wayfinding and make a distinction from hard flooring on path of travel.

Reception desks, check-in kiosks are to be accessible to all users including receptionists who may use a wheelchair. Design an integrated lower wheel in counter for wheelchair users which is visible when you enter. Receptionists should be provided with a sit stand desk for best ergonomic solution.

Provide every lobby waiting space with a dining height table and accessible power outlets. Lobby furniture is placed in a way that there is a clear path through the space to reception desk and circulation areas such as elevators.

Where space allows provide a variety of seating and table heights to provide for a multitude of body types and activities.

Microsoft One Esterra

Good Practice for Accessible Design

Vertical circulation

All levels of Microsoft buildings or Microsoft leased space is required to be accessible, either by level entry, elevator or compliant ramp access, ensuring equal access to spaces for people with disabilities, including mobility device users.

Install vertical actuators along side a touch screen with a tactile call button below for destination dispatch elevators. Elevator cars must be large enough to accommodate a **67”(1700mm)** turning circle, have illuminated buttons with braille and audio announcements for every floor. Use braille on elevator call buttons.

Provide clear directional and other wayfinding signage in elevator lobbies and stair discharge locations.

Stairs require accessible handrails that extend **12”(300mm)** past the edge of the final tread and return to wall to avoid snagging on clothes. Provide color contrasting nosing on top and face of treads, and color contrasting landings. Place tactile indicators at the top of staircases. Provide good lighting on staircases.

Microsoft East Campus – Building 5 - ©Tim Griffith

Good Practice for Accessible Design

Exterior Spaces

Provide a variety of seating and table types and heights to accommodate a multitude of body types and activities.

All outdoor spaces and balconies shall be accessible, with easy access through doors, (level threshold is achieved) and must have adequate circulation space for a person using a mobility device. Wide walking surfaces.

Provide accessible features that allow those with disabilities, including mobility impairments, to participate and spectate when designing outdoor facilities.

Provide accessibility for outdoor amenities such as decks, treehouses, or terraces.

Provide covered spaces for shade.

Ensure exterior amenities apply the same accessible provisions as interior spaces.

Microsoft East Campus – Building 5 - ©Tim Griffith

Good Practice for Accessible Design

Wayfinding and signage

Microsoft has robust interior and exterior signage and wayfinding guidelines for design.

All room and wayfinding signage should be designed with the right contrast levels and mounted at suitable heights for visibility from a distance and at accessible reach range at room destination entrance. Remember flooring, lighting and finishes can all aid wayfinding in addition to signage.

Provide high-contrast large font labelling and braille for equipment and amenities.

Create an interactive map directory that can be used with a personal device such as a phone, to help with navigation; provide guidance on what is available on site.

Apply a **Tactile Wayfinding System** externally using tactile walking surface indicators to provide cane detectible and trackable material that contrasts with surrounding hardscape both tactually and visually to:

- Create vehicular and pedestrian edge detection/delineation
- Create point to point navigation
- Create a means to locate accessible signage for white cane users and others with blindness or low vision.

Microsoft Reston

Good Practice for Accessible Design

Neighbourhoods and collaboration

Provide a simple communication device that indicates whether someone is happy with collaborating at their work point.

Provide focus zones in open work areas where quiet is valued, and equipment noise is minimized.

Place workstations away from distractions caused by people walking by or regular opening/closing of doors. Utilize visual and acoustic barriers where necessary to protect working areas.

In larger conference rooms, provide an option to sit on the side of the room instead of directly at the table. Provide power within accessible reach.

Provide collaboration spaces in a variety of sizes to meet various meeting needs.

Provide clear circulation around meeting tables without obstacles to users of mobility devices when people are seated at the table. Refer to Microsoft space type standards. Minimum areas must be met.

Top – Microsoft Shanghai
Bottom – Microsoft Montreal Marconi

Good Practice for Accessible Design

Mail and supply rooms and lockers

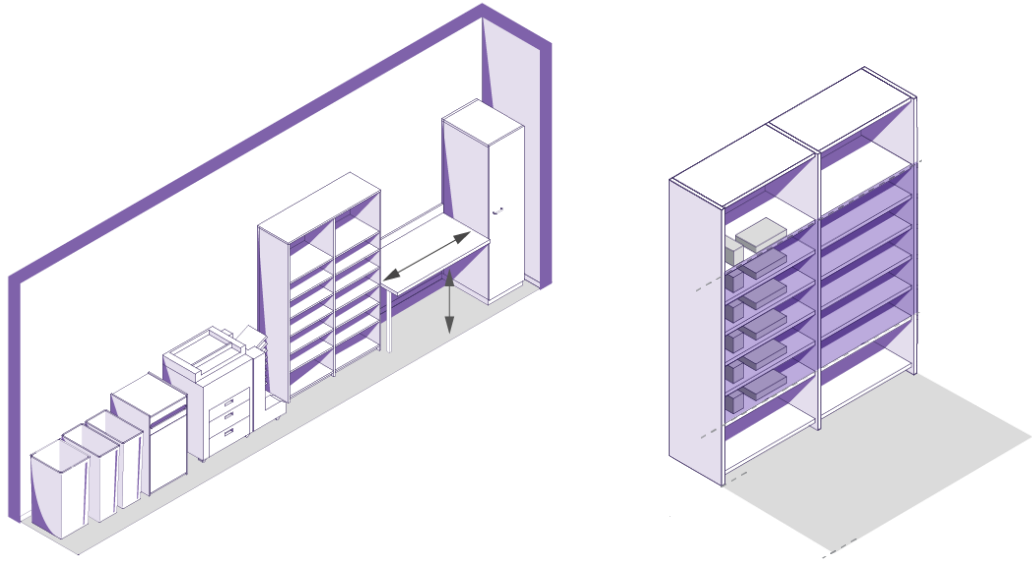
Accessible counter required in supply rooms. Accessible knee and toe clearances apply. Minimum width of counter **36"(914mm).**

Provide all supplies storage levels with large font high contrast labelling including braille.

Ensure no lockers are provided below **15"(380mm)** AFFL. All lockers to have; the same size and volume; tactile numbering and braille signage; **60" wide x 48"(1520mm x 1220mm)** in front of doors for accessible side approach. Choose finish that gives clear definition between lockers either by using contrasting colors for doors or contrasting ironmongery/locks.

Ensure suitable and adequate circulation around locker spaces to accommodate the user and other traveling behind them if lockers are situated within an open area.

Keypad locks require raised keys from the field and a standard **3 x 4** number layout (if there is no braille on the keys) that mimics a phone keyboard. A raised dot on the number **5** is helpful for touch orientation.



Top – Microsoft Sao Paulo

Bottom – Copy room and vertical stacking diagrams

Good Practice for Accessible Design

Food service

Ensure that minimum accessible path of travel **36”(915mm)** around self-serve stations, ordering and pick-up counters, and seating areas is maintained. Provide enough clear space for people using wheelchairs, other mobility aids, or service animals, especially when chairs are pulled out and occupied.

Introduce “Accessibility Mode” for checkout and ordering systems, that includes high contrast monitor displays and large font, tactile navigation options with headphones providing audio descriptions.

All products and amenity controls to be within accessible reach. Lower standard height counters to place controls within accessible reach if necessary.

Provide wheel in sink areas with side mounted faucets and soap dispensers. Faucets, soap dispensers and towel dispensers to be automatic operation. Counters should not exceed **24”(600mm)** in depth or **34”(860mm)** in height.

In large dining or hub areas or places that are likely to get crowded provide shielded quiet nooks on the periphery of the space including spaces that are accessible by wheelchairs.

Top - Microsoft East Campus – Building 9 - ©Tim Griffith
Bottom – Microsoft East Campus

Good Practice for Accessible Design

Recreation and locker rooms

In recreation rooms or specialty areas use loose and portable furniture so the space can work flexibly, and items can be moved to keep a clear path for access.

Where showers are included on site, provide an accessible shower for each gender and one for use by all genders.

Locker room partitions should be designed to ensure privacy and accessibility to all users. Create a private dressing area in front of the shower area.

Ensure curtains are provided between dry and wet areas in accessible showers to protect mobility devices from water.

Maintain all accessible reach ranges and knee and toe clearances in locker and changing rooms.

Top - Microsoft Atlanta
Bottom – Microsoft Raleigh

Good Practice for Accessible Design

Wellness, Meditation and Lactation rooms

Provide a front approach accessible sink where required under space type requirements. Provide an accessible under-counter refrigerator in Lactation rooms.

Provide quiet visually peaceful spaces as an alternative to high energy spaces.

Support or wellness spaces should have reduced stimuli and be clearly delineated as to their purpose and always available. Make sure people know there is an alternative space if their first choice is occupied.

Placing wellness spaces in outdoor areas creates the opportunity to connect with nature. As a minimum aim to provide a view outside or design with natural materials.

Provide comfortable seating that is adjustable, or provide a variety, to accommodate all body types.

Install customizable temperature and lighting controls.

Top – Microsoft Seoul

Bottom - Microsoft East Campus – Building 5 - ©Tim Griffith

Good Practice for Accessible Design

Restrooms

At Microsoft we have robust space and equipment standards for restroom spaces. It is paramount that adequate, easy to locate facilities are provided - this is an important accessible feature.

Specify automatic faucets and soap dispensers for all restroom washbasins and automatic flushing cisterns for all washrooms. Wheel in washbasins should be provided in all washroom areas. Occupancy signs to use color as well as text.

Provide male, female and all-gender accessible restrooms and include sanitary waste disposal in all types of accessible restroom.

Ensure restrooms are centrally and conveniently placed and ideally in same position on each floor, including near lobby spaces for visitors.

Privacy is important – entrances to the restroom facilities should be configured ensuring a view into the facility is not visible through the main doorway or entrance doors are shielded if they are adjacent to open spaces.

Hand dryers should be designed to avoid drips on the floor, minimizing slips and trips.

Top - Microsoft Boulder

Bottom – Microsoft Redmond

Guidelines for Neurodiverse Workplaces

Building Approach and Envelope

- Provide wider pavements on approach to the building that follow natural organic lines.
- Entrances should be clearly defined and obvious to find.
- Where appropriate provide a canopy and glazed entrance doors to allow someone to observe lobby before entering.
- Lobby design to avoid overcrowding.
- Where possible offer alternative entrances away from crowds.
- Avoid high contrast floor matting as can cause a strobe effect for some.
- Introduce shade to external spaces.
- Acoustic glazing should be used to mitigate external distractions.
- Blinds provided to reduce glare and visual distractions.
- Avoid slatted/venetian blinds as these can cause a strobe effect.
- Consider perimeter strips/seals around blinds to avoid light seepage.
- Where full height glazing is present on the building façade consider opaque film to reduce symptoms of vertigo or Meniere's disease where people can feel dizzy and unsteady.
- Avoid metallic elements that would need to be touched as they can heat up quickly and be hazardous to those vulnerable to burning.
- Avoid reflective surfaces on the building especially at street level that could cause glare on approach.

Internal planning and FFE (Furniture, Fixtures and Equipment)

- Building layouts should be logical.
- Consider curved walls to improve sightlines into key spaces.
- Entrances and exits should be clearly visible, and where possible provide alternative quiet routes avoiding crowds.
- Facilities teams should advertise when spaces will be very busy.
- Allow for gradual sensory transitions especially regarding, noise light or visual stimulation. (Consider sensory mapping for projects).
- Ensure space type minimum area standards are adhered to and highlight where this is not possible.
- Provide escape or retreat areas in large open spaces i.e. Cafeteria. This can be achieved with high backed chairs, semi enclosed areas using half height partitions or screens or lower ceilings.
- Reception should be visible from the main entrance doors.
- Restrooms and support spaces are ideally in same location on every floor for easy navigation.
- Provide glazed doors into large open plan spaces.
- Room layout changes can be unsettling for some, ensure facilities teams give options for where people choose to sit.
- Open collaborative spaces are ideally zoned into areas of activity, varying in noise, lighting and temperature levels. Users should be given a choice of where to sit according to environmental preferences.
- Be generous with corridor widths, especially the primary paths of travel.
- Lighting design should aim to eliminate dark spots. (Where that is not the design intention for the space type)
- Fixtures should have familiar look and operation, with basic ergonomic principles for comfort and intuitive use.
- Quiet areas/ wellness rooms should be planned to feature symmetrical design or show visual balance.
- Changes to a room or layout can be unsettling for some - Facilities to engage with users of the space before carrying out changes.
- Think about locating screens away from areas where people must wait. (This does not include depart screens and the associated waiting areas near them
- Fixtures and controls should be low noise where practicable.
- Furniture should vary, employ soft natural materials, be ergonomic, have low/no VOC’s.
- Furniture with rounded corners preferred.

Exterior Spaces

- Provide pockets of green space that can also provide some shade and protection from the elements.
- Try to locate relaxing outdoor spaces away from sensory stimulation such as traffic noise, extract ducts, service equipment.
- Provide a variety of green spaces for activity as well as relaxation.
- Avoid sharp, thorny or strong-smelling plants.
- Any changes in external lighting intensity should be gradual as someone transitions through the space.
- Lit bollards and exterior lighting should be directed downwards to avoid glare for some at lower viewing heights.
- Where external spaces cannot be provided consider adding natural materials to the design. Include biophilic elements.
- Where using images of nature inside, limit the size and frame images to avoid perception viewer is outdoors.

Wayfinding

- Consider wall finishes that can withstand touching as ability to touch surroundings can help users feel more grounded. Consult with facilities teams on maintenance, cleaning and hygiene.
- Walls and floors should have color contrast. **30-point LRV** required. Distinction can be achieved with a muted palette without giving a stark contrast.
- Where possible utilize technology for wayfinding, offering previews of routes and spaces. Consider creating a website or virtual flythrough. Provide audio descriptions for those with low vision. Display a simple plan of the interior at the entrance of the building to help users orientate themselves within the building.
- Provide link to information about building environments on all invitations and appointments.
- Consider compiling a sensory map showing noisy stimulating areas and quiet calm spaces.
- Consider 2-way communication devices for large scale complicated buildings.

Services

- Enclose tea points and kitchen areas that are near workstations to contain smells. Ventilation systems to be stringent enough to prevent odors from kitchenettes canteens, technical equipment that may emit smells and restrooms.
- An air quality display may help alleviate anxiety.
- Provide a choice of environments. Create areas with different temperatures, noise levels, visual stimulation, activity and lighting enabling users to work at a position they are most comfortable with.
- Avoid materials that contain VOC's.
- Chemical masking should not be used for unwanted odors.
- Plan for a gradual transition from quietest to noisiest spaces or from noisiest spaces near the entrance to quieter spaces deeper in the building.
- Hand dryer noise levels should remain below **70dB.**
- Minimal noise emitting HVAC equipment should be specified and acoustically insulated ductwork provided to minimize noise transfer through the ductwork.
- Facilities to check regularly for repetitive sounds like dripping taps, ticking clocks etc.
- Copy rooms to be enclosed to control noise from equipment.
- Lighting temperature at **3000K.**
- Rapid movement/changing light installations should not be installed as they present a risk of seizures.
- Avoid reflective surfaces to reduce light glare and reflection.
- Lighting design must minimize shadows as for some these can be perceived as an obstruction or hole in the ground.
- When adding recessed lights be careful not to create stark contrast or shadowing.
- Ceiling mounted luminaries should ideally have a beam angle of **20-45 degrees** that will mitigate glare and creation of long shadows.

Services - continued

- Supplemental lighting on vertical surfaces and up light should be used to create a good balance of light distribution.
- Facilities teams to regularly check for and eliminate flickering lights.
- Lighting should reflect the space and task for the space. For example, work task areas require brighter lighting than corridor spaces.
- Provide ability for users to adjust lighting levels in enclosed space types for their own comfort and to adjust lighting over individual seating areas by providing either switched ceiling lights or desk lamps. Ability to adjust lighting is essential in Wellness rooms.
- Movement triggered lighting should illuminate gradually to avoid alarming some people.
- Rooms where sensors are placed should have a continuous low level of illumination (recommend **10%** lighting intensity with a **3-5** second transition to full lighting levels)
- Accessible restroom lighting should remain on for an extended period and sensors will be required in each cubicle as well as outside circulation/sink areas.

Finishes, patterns and materials

- Wall and floor finishes should have low reflectance, be matt or low sheen to avoid the appearance of being wet or slippery.
- Using muted colors or colors that can be found in nature generally create environments that are calm.
- Offer a variety of environments with mix of visually stimulating and muted décor to cater for a variety of sensory requirements. In Wellness rooms always use neutral palette.
- High contrast patterns should be avoided as they can increase visual discomfort.
- Avoid bright motifs dark backgrounds or vice versa, repeated at short intervals or over a large areas this can be extremely over stimulating for many hypersensitive people.
- Other common sources of visual discomfort are found in patterned finishes, tiling, louvers perforated sheet materials railings, stair treads, entrance mats and repetitive elements used in modular construction.
- Do not include complicated images with visual noise hidden within the image.
- Review large expanses of wall, floor or ceiling for any visual discomfort and final patterns and images to be fully rendered in context for approval prior to production.
- Avoid large areas of stripes and geometric patterns with high contrast; uniformly spaced and sized repetitive items of high contrast or luminance.
- Avoid patterns in main communication points such as main reception, and quiet places where people need to focus.
- Avoid bold patterns on walkways or stairs where there are risks of falling.
- Patterns that occur in nature are generally received well and can have a positive effect.
- Avoid fabrics that feel rough but try to provide a variety of upholstery finishes for different preferences.
- Shiny reflective materials should be avoided.
- Use similar tones for adjacent floor finishes and avoid shiny or visually contrasting floor trims.
- Low odor flooring required.
- Where circulation spaces are defined by flooring color/type try to introduce gradual transitions with incremental LRV changes.
- If color differences are required, try to use colors with similar LRV’s.
- Avoid black floor finishes in elevators as it can be perceived as a hole.

Wellness rooms

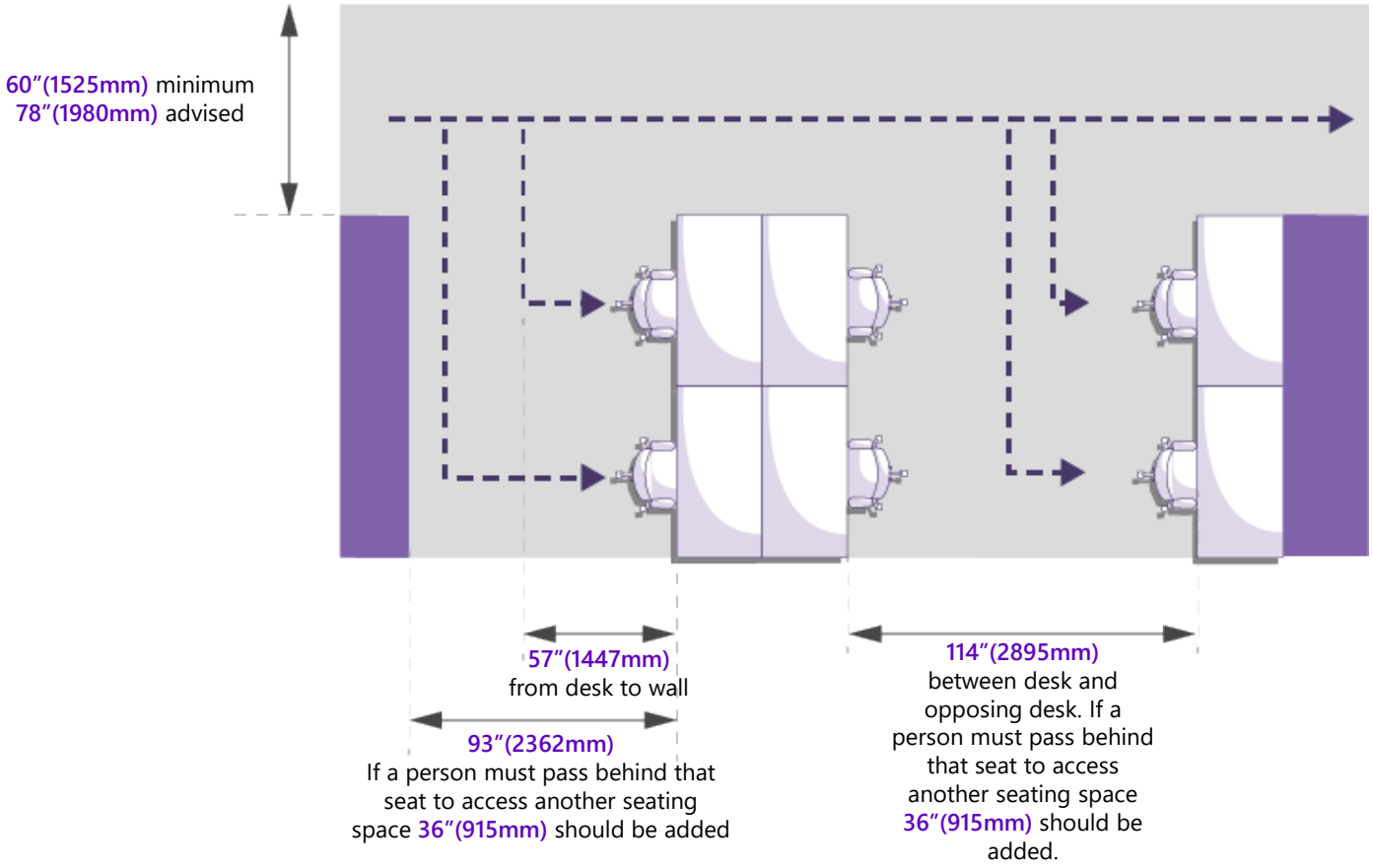
- Wellness rooms should be designed as a flexible environment and customizable to an individual's sensory needs.
- Quiet areas/ wellness rooms should be planned to feature symmetrical design or show visual balance.
- Spaces should be calming with finishes and fittings that will not over stimulate the senses.
- No odors or background noises.
- Should not be bookable.
- Try to provide an alternative space when a wellness room is not available.
- Show if room in occupied on internal intranet system.
- Position in workplace to allow easy/immediate access from nearby collaboration, learning or activity spaces. Allows people to rejoin easily when recovered.
- Curtains provided on exterior windows.
- Provide noise/music choices.
- Temperature control - provide fan and blankets to cool down or warm up.
- Dimmable lighting should be provided.
- Design with muted, natural organic forms, colors that appear in nature.
- Ensure uncluttered limited artwork.
- Provide furniture that can be easily repositioned.
- Provide floor cushion pillows for some that feel safer closer to the floor.
- Remove any items that can be easily broken.
- Provide small shatter resistant hand mirror to allow users to check appearance before leaving.

Useful Diagrams

The following diagrams are a good practice guide. Refer to local code when designing spaces.

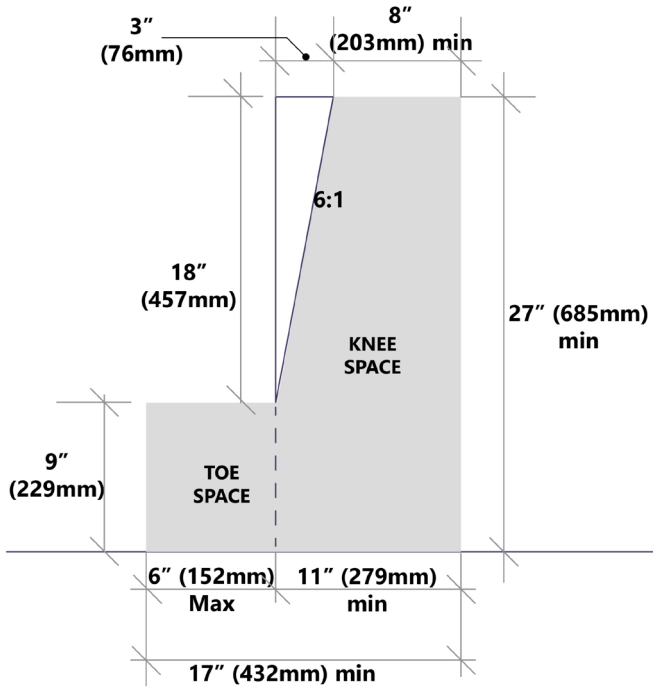
Useful diagrams

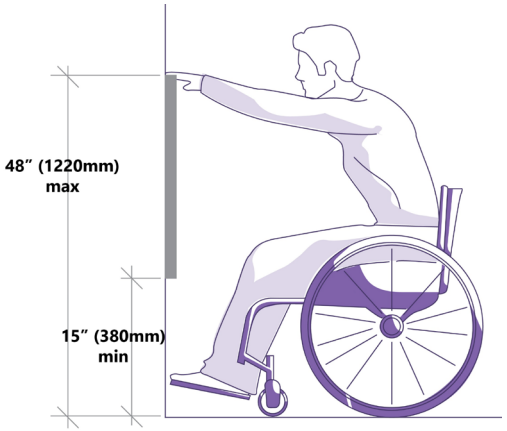
D1.01 Accessible workstations

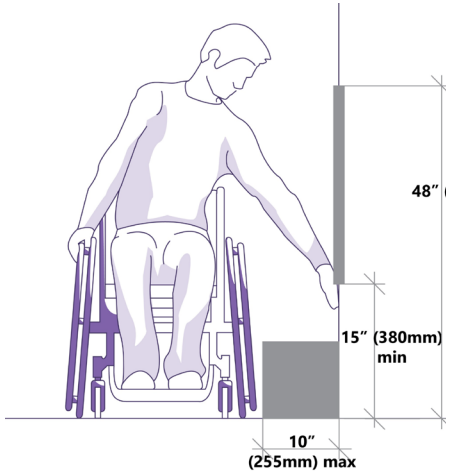


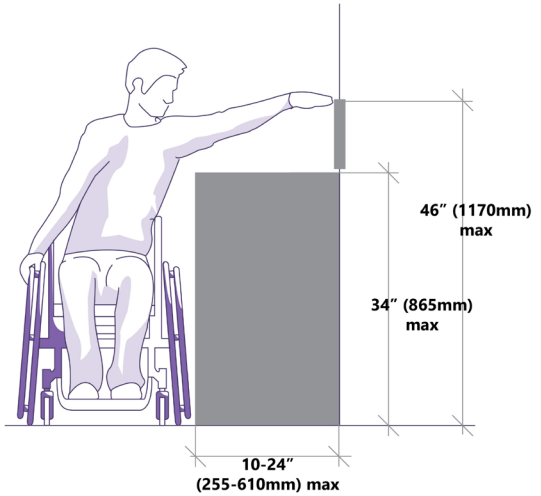
Useful diagrams

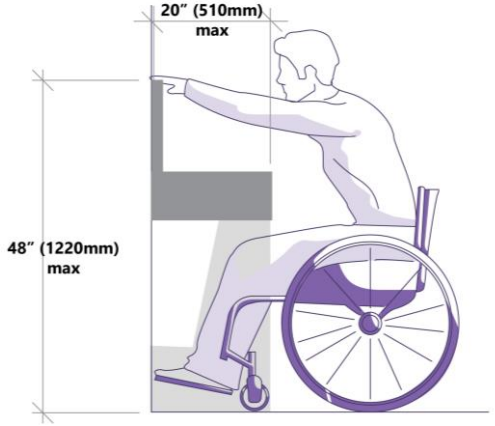
D1.02 Knee and toe clearance/ Accessible reach

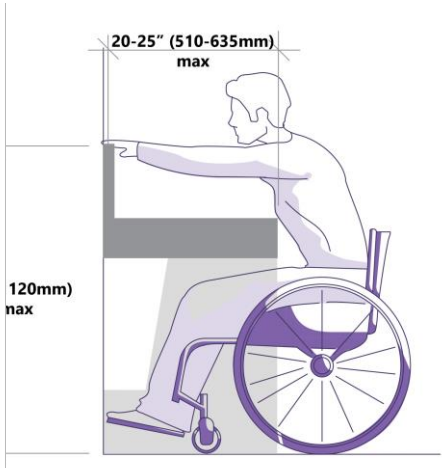


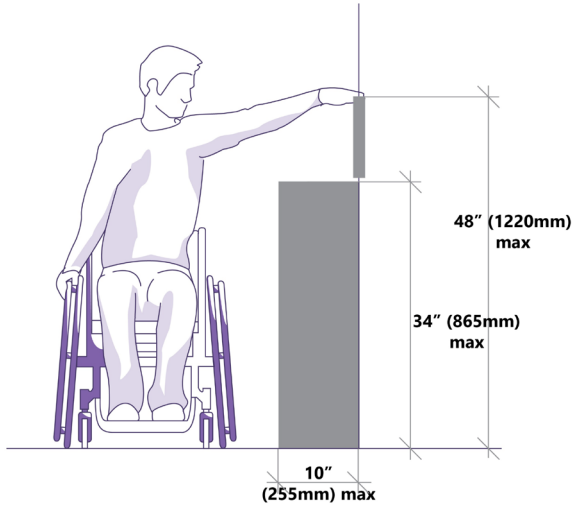








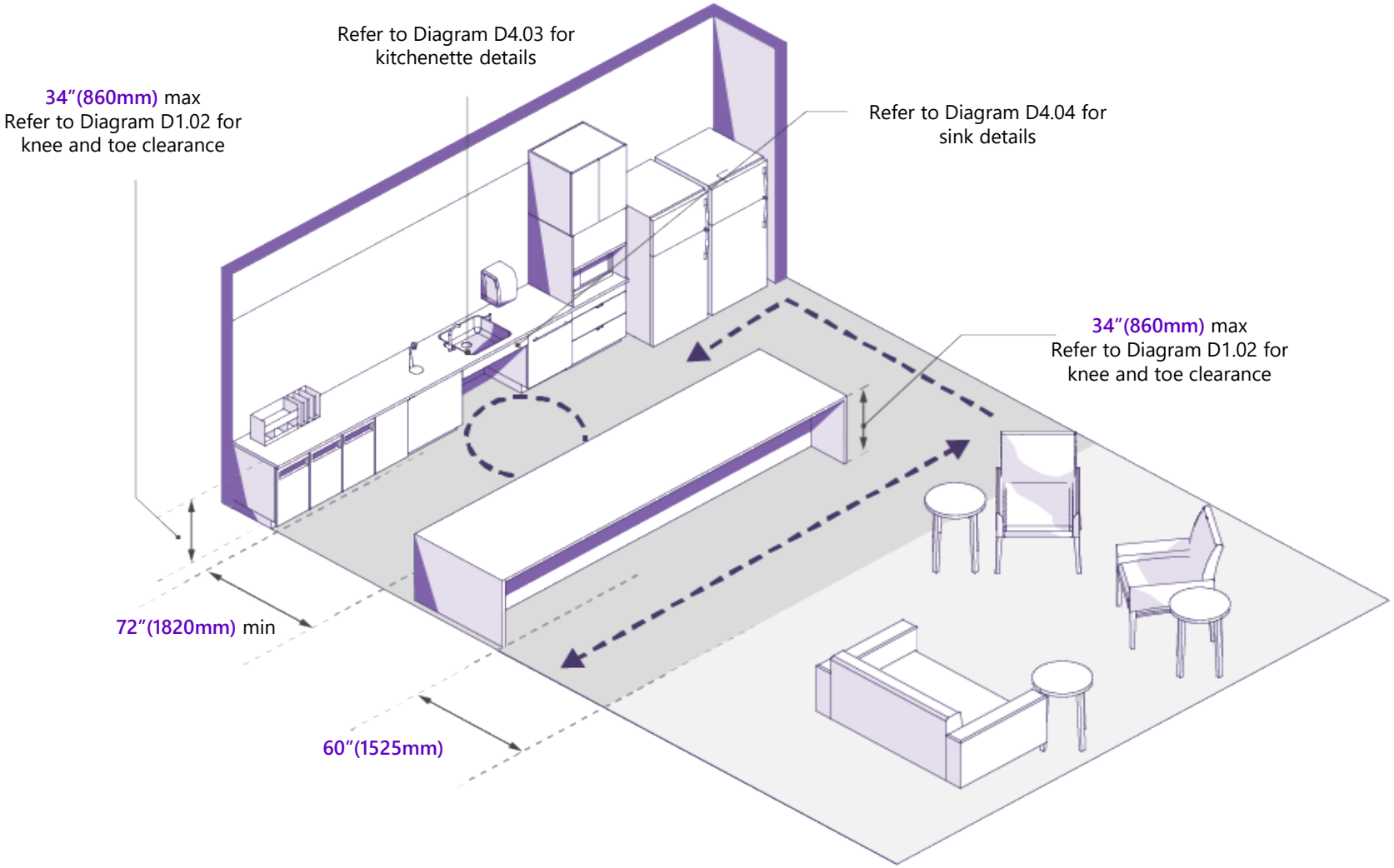




For further guidance refer to *ADA 306 and 902.* https://www.access-board.gov/ada/#ada-902
https://www.access-board.gov/ada/guides/chapter-3-clear-floor-or-ground-space-and-turning-space/#knee-and-toe-space

Useful diagrams

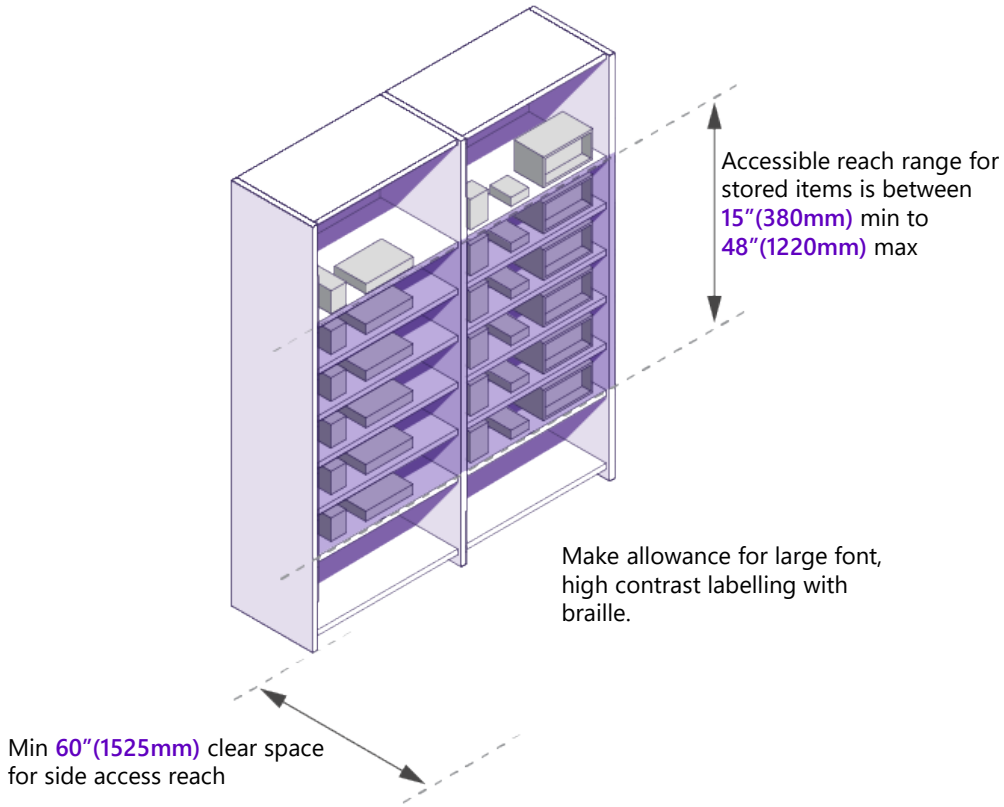
D1.03 Kitchen island counters



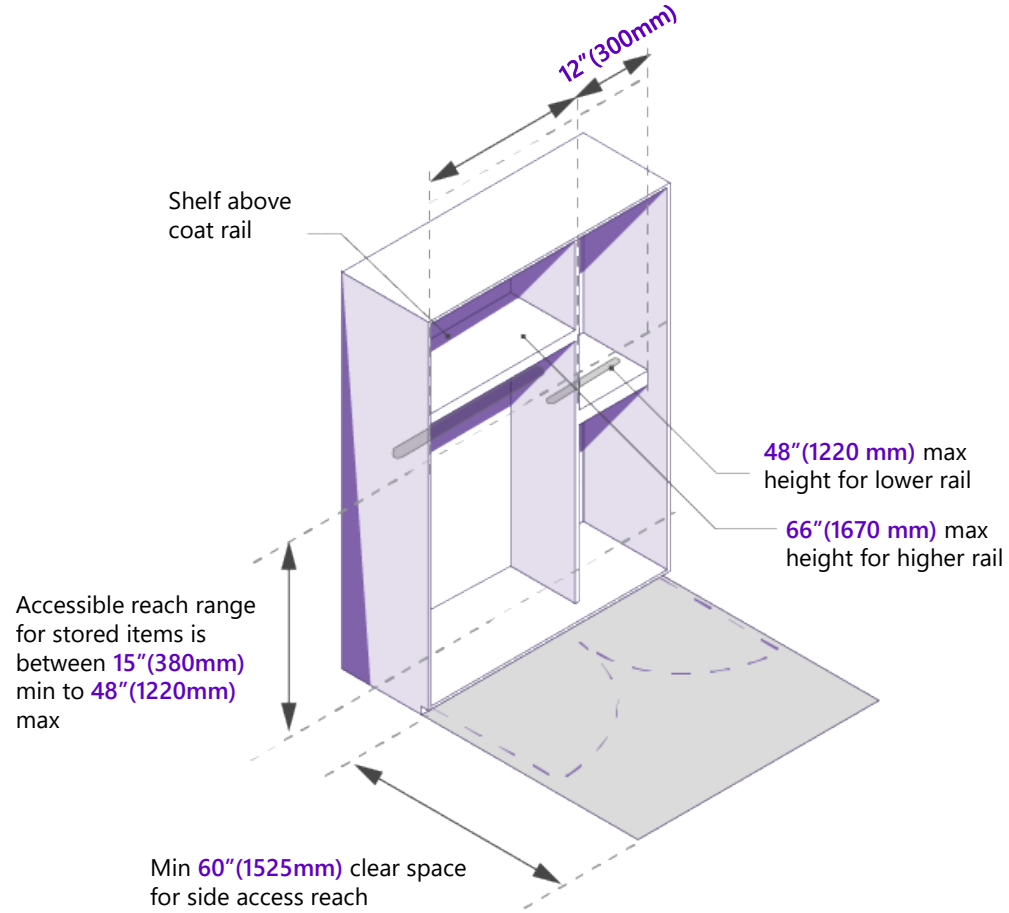
Useful diagrams

D1.04 Storage and shelving - vertical stacking

Apply vertical shelf stocking to provide the same items at both a lower and higher shelf, so that vertical space can be used (and may be preferred for taller persons) without putting items out of reach for people of short stature or in wheelchairs.

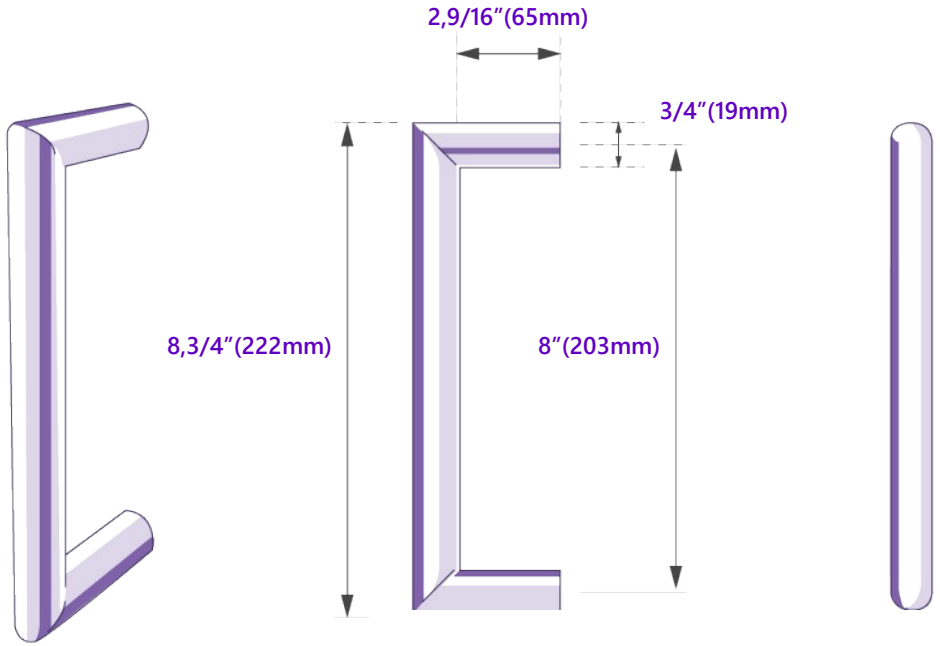


D1.05 Accessible coat closet



Useful diagrams

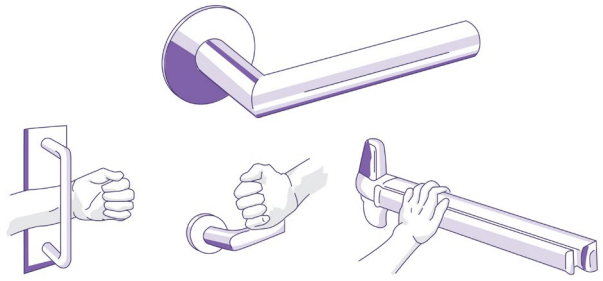
D1.06 Cabinet and door handles



Specify hardware that is usable with a closed fist or loose grip.

Bars, pulls, and similar hardware should provide minimum knuckle clearance (**1½ inches minimum**) to facilitate gripping.

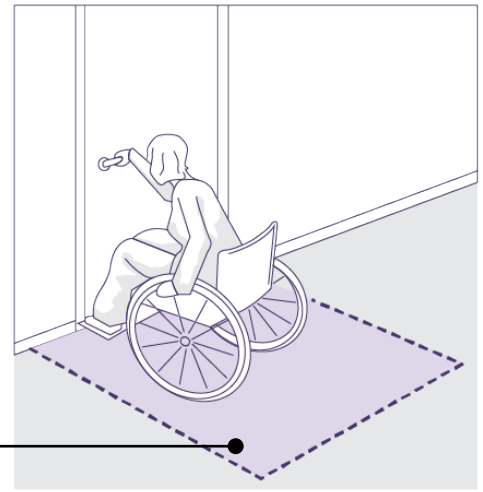
Avoid hardware that requires hand or finger dexterity, fine motor movement, or simultaneous actions.



D1.07 Door landings

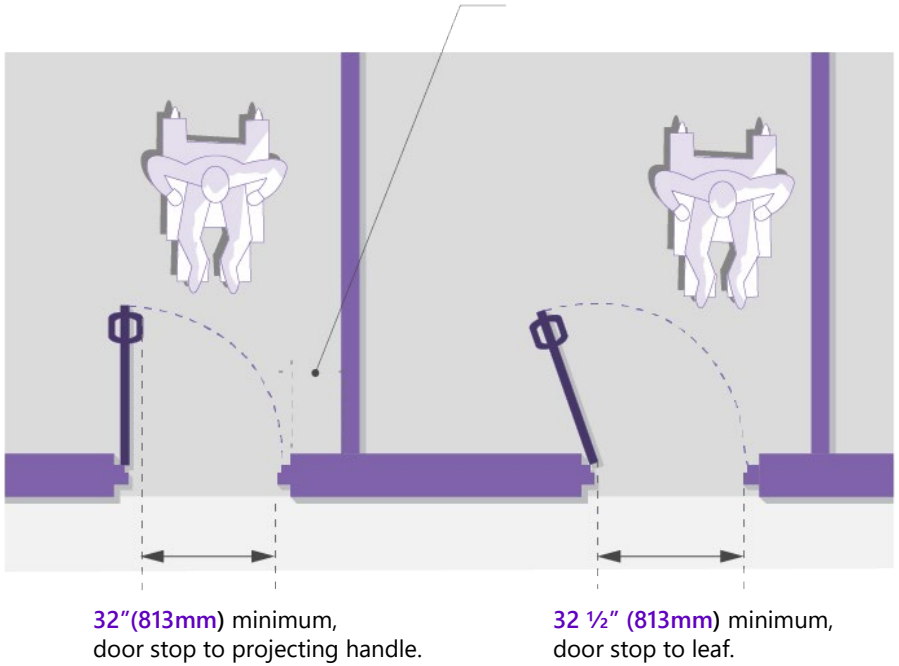
Refer to D1.08 for door clearance width

60”x60”(1525mm x 1525mm) minimum, aligned to the hinge side of the door.



For further guidance refer to *ADA 404.2.4*
https://www.access-board.gov/ada/guides/chapter-4-entrances-doors-and-gates/#maneuvering-clearances”

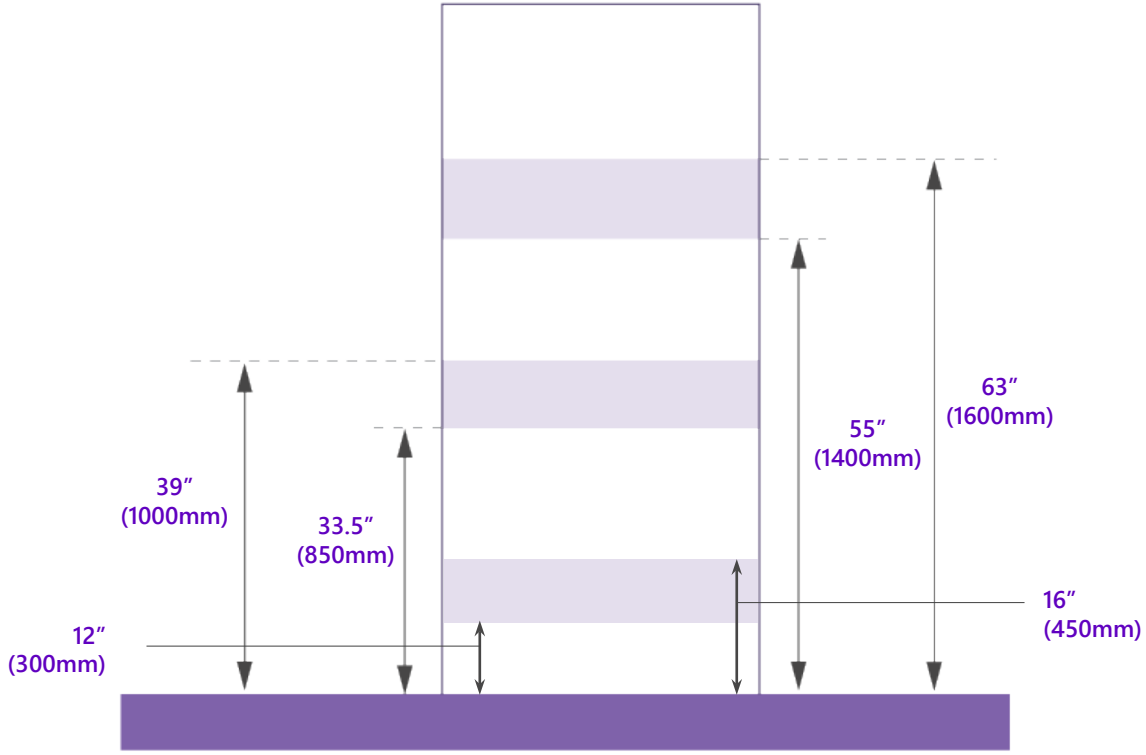
D1.08 Clear opening width



Local code must be followed where requirement is more stringent i.e. *2010 ADA Standards for Accessible Design.*

D1.09 Glass manifestation heights

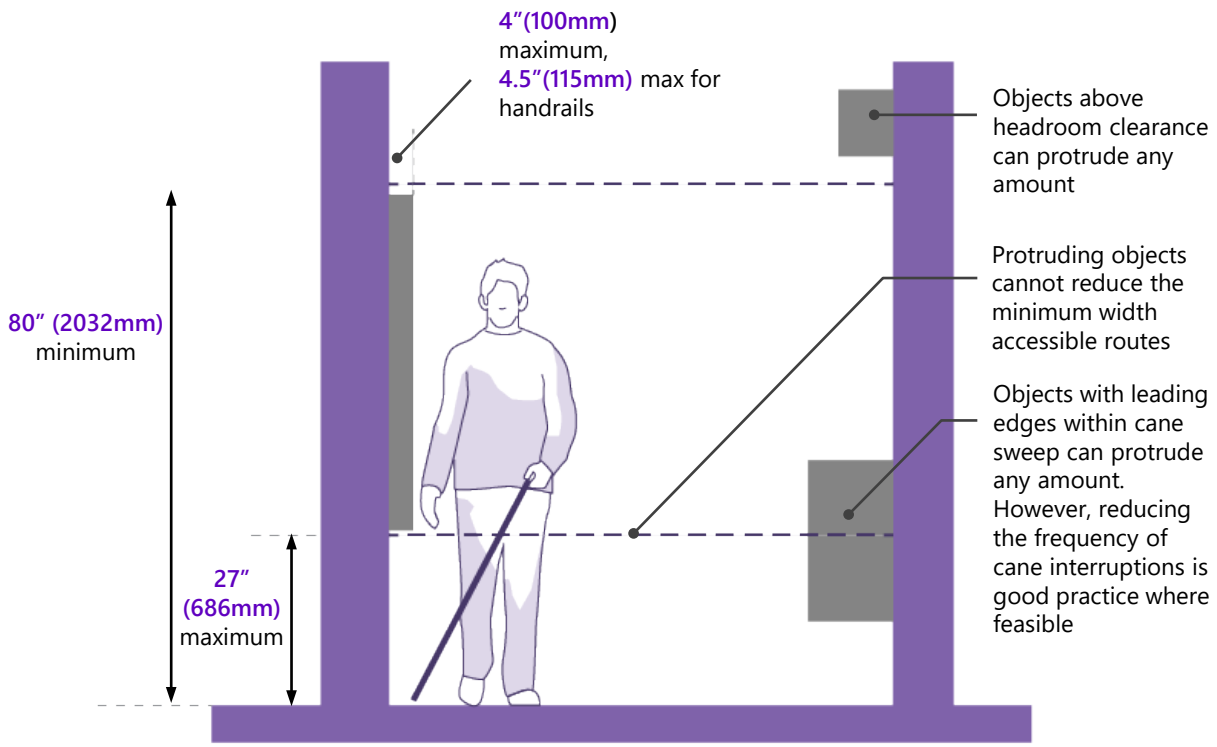
Manifestation can be in various forms or motif, a minimum of 150mm high (repeated if on a glazed screen), or a decorative feature such as broken lines or continuous bands of minimum of 50mm high.



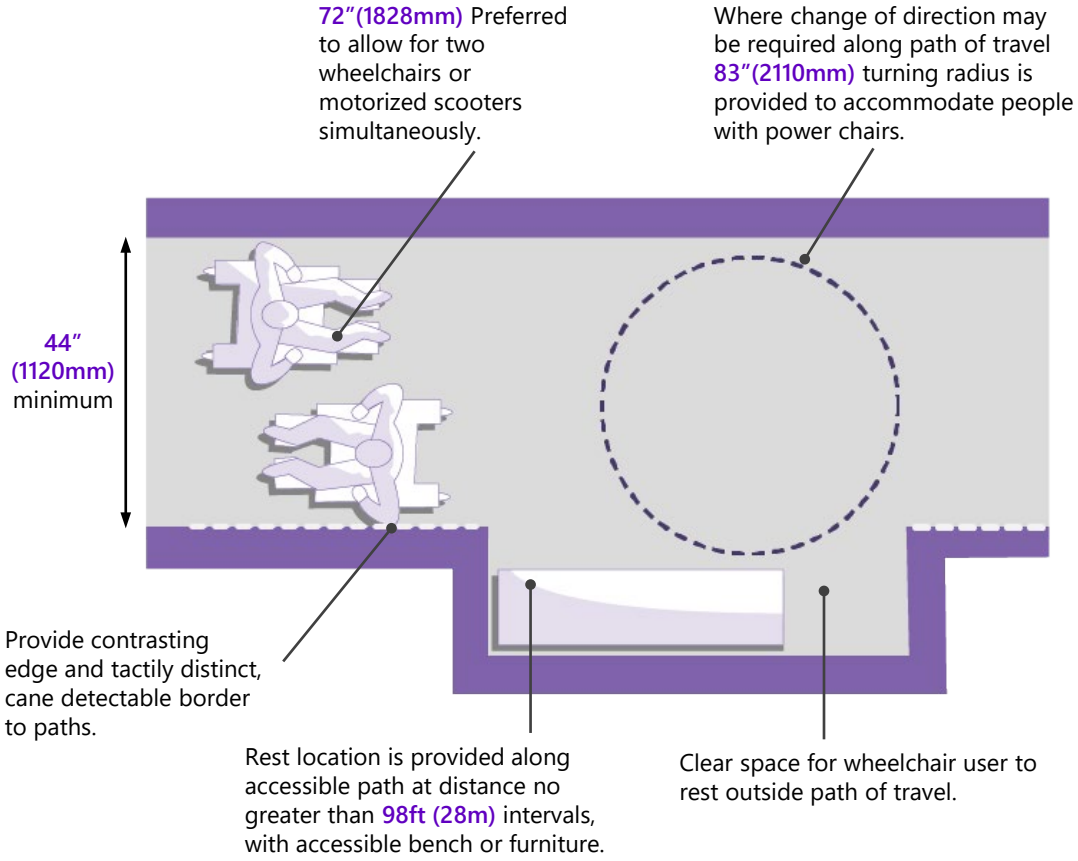
Providing a lower band at 300mm high can assist those who navigate by primary looking downward.

Useful diagrams

D1.10 Protruding objects

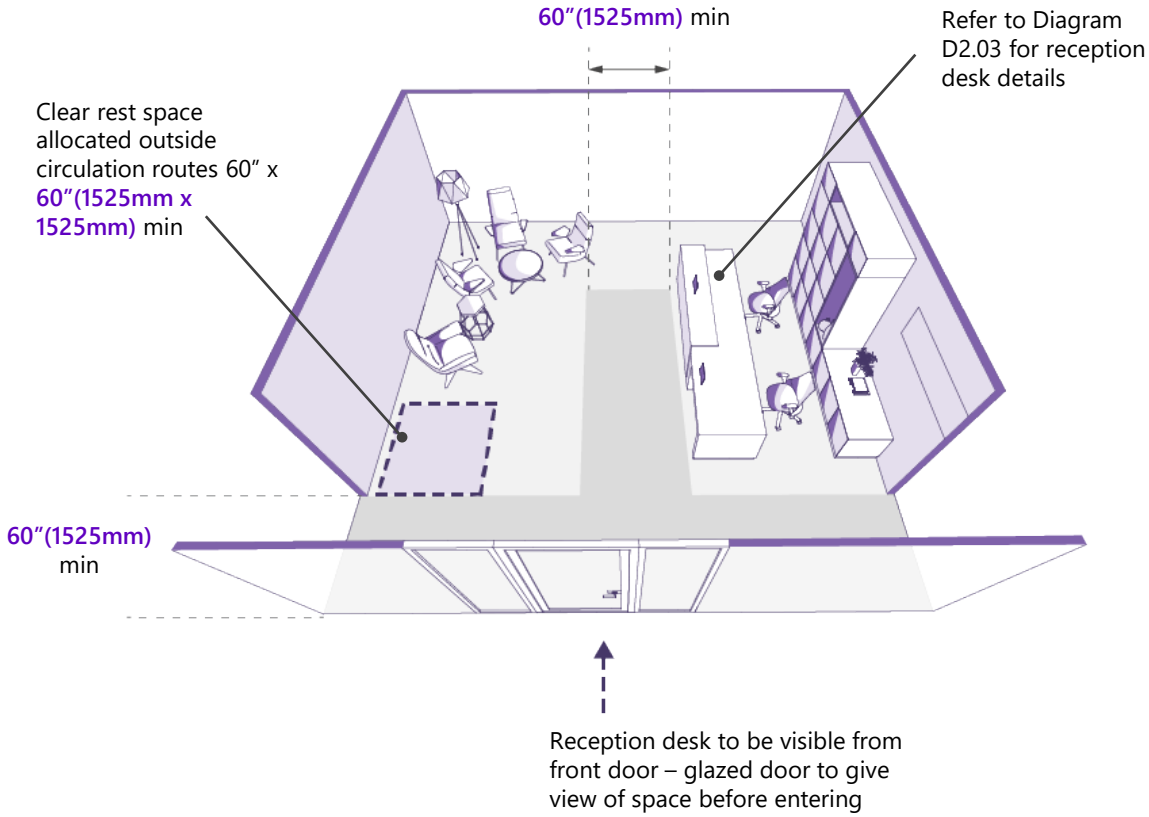


D2.01 Path of travel

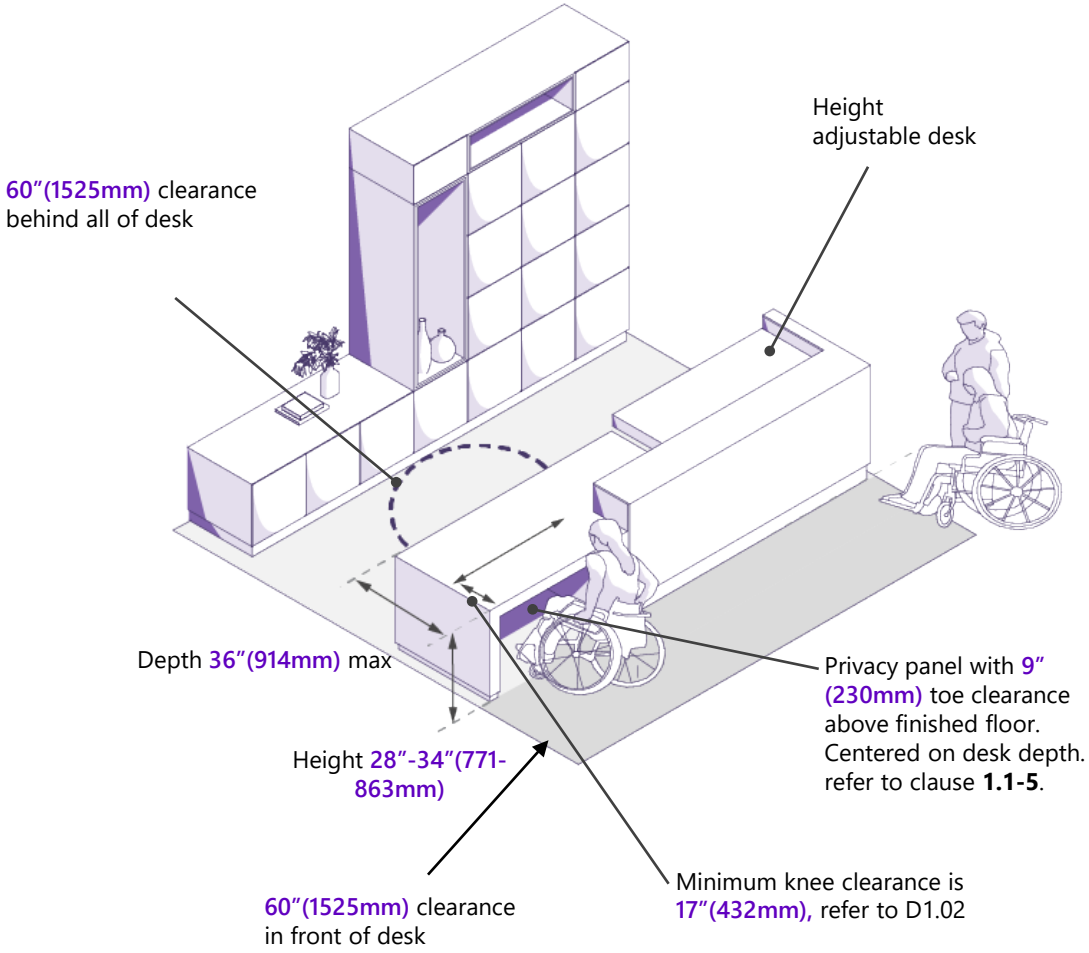


Useful diagrams

D2.02 Lobby Diagram

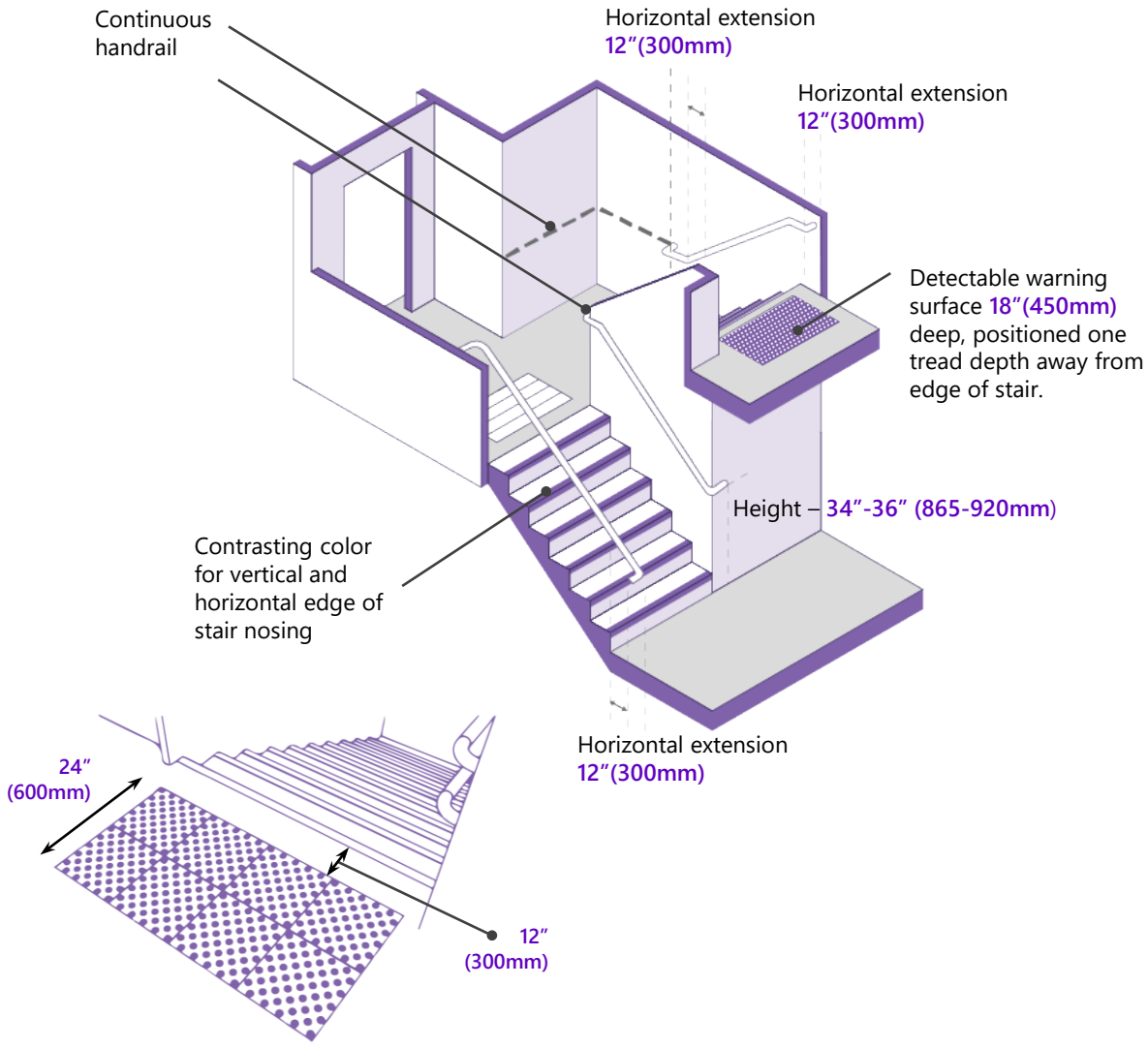


D2.03 Reception desk

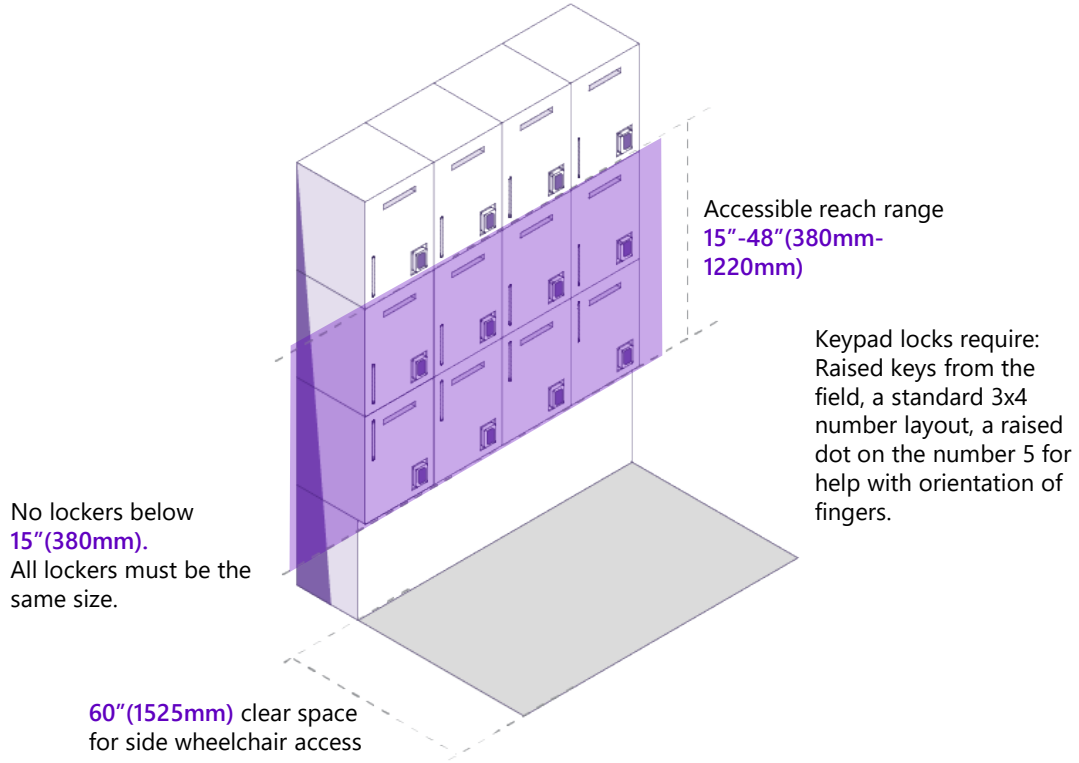


Useful diagrams

D2.04 Stairs

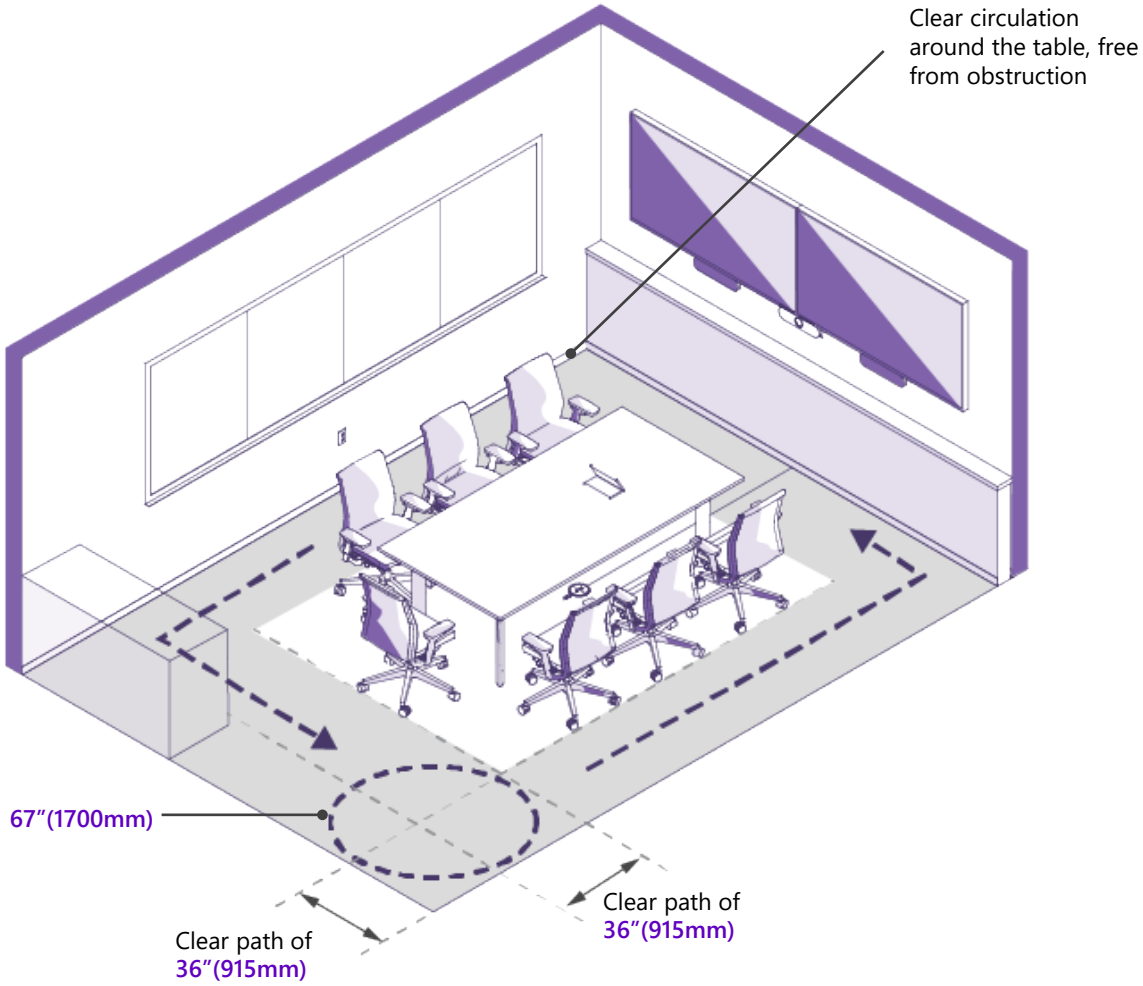


D3.01 Lockers

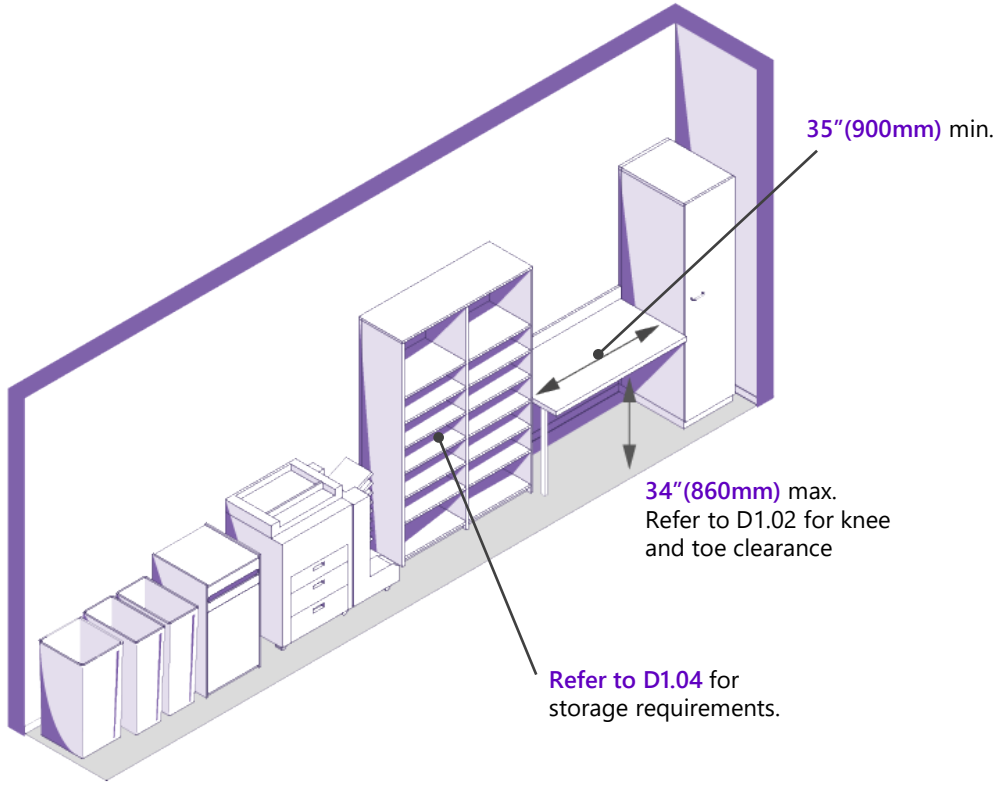


Useful diagrams

D3.02 Conference room circulation

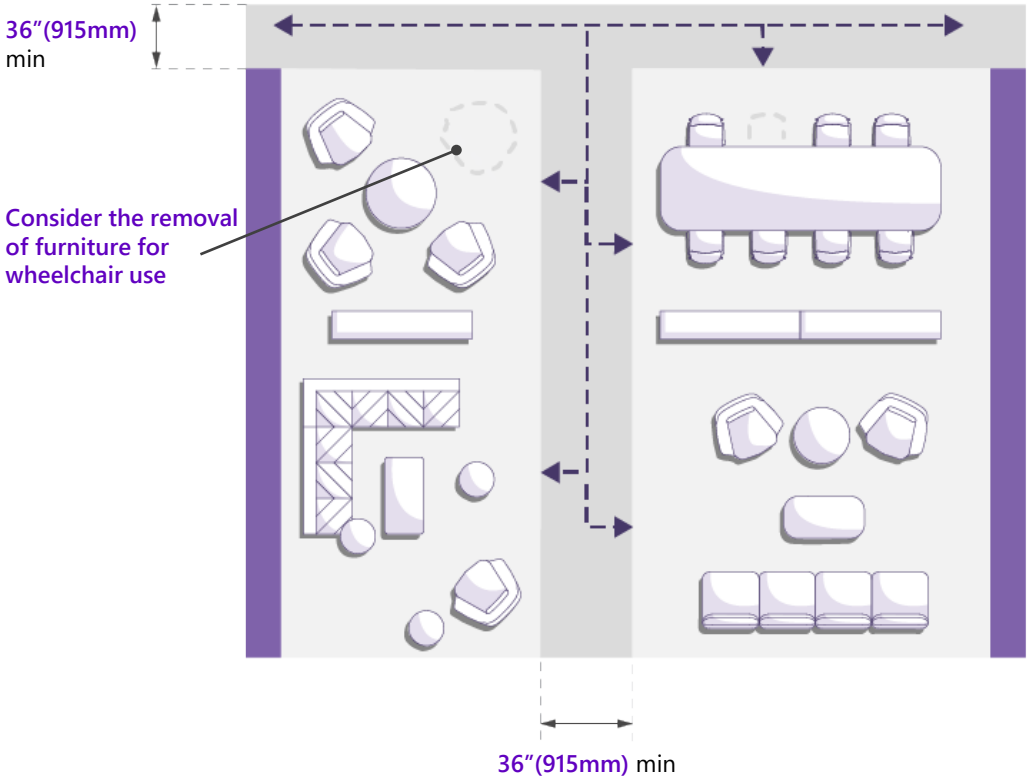


D3.03 Mail room /Supply room counter



Useful diagrams

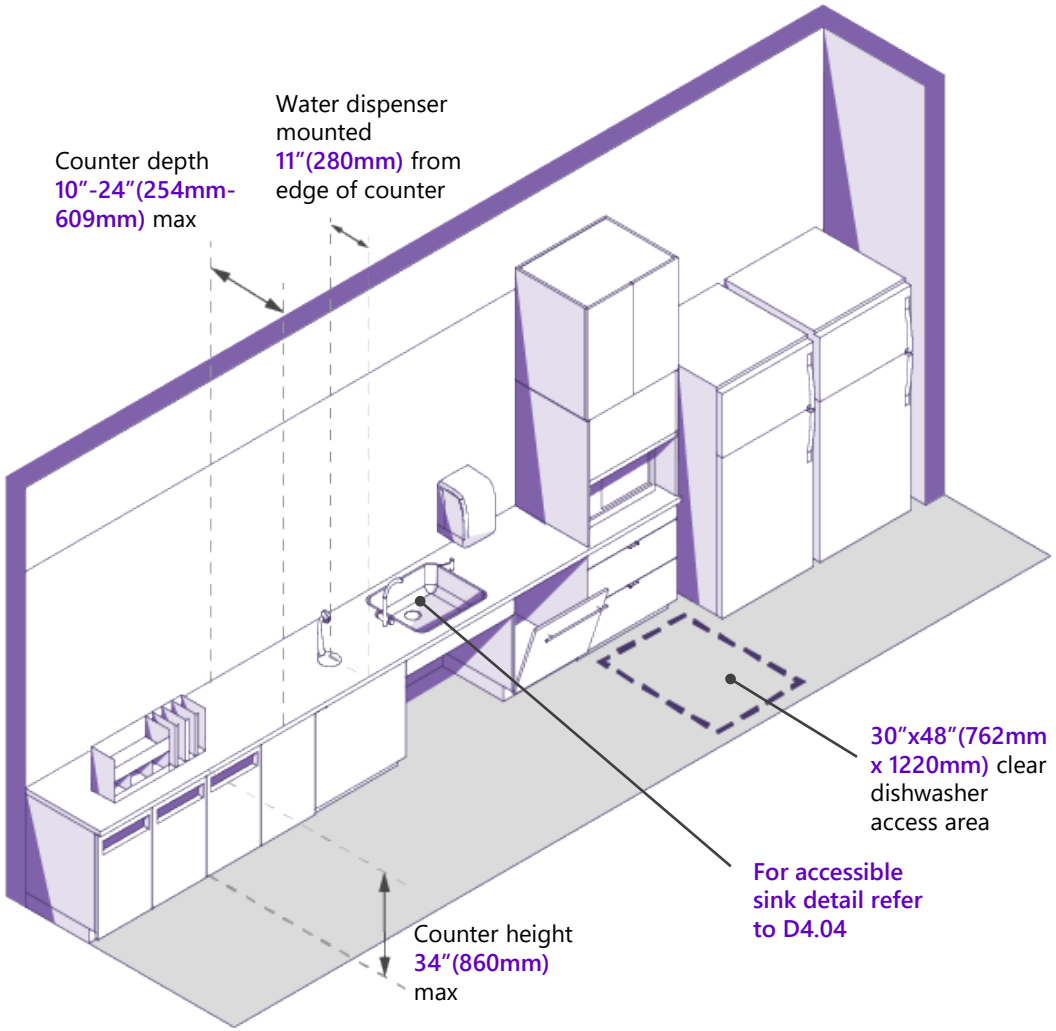
D4.01 Furniture Settings - clear path of travel



D4.02 Accessible amenities

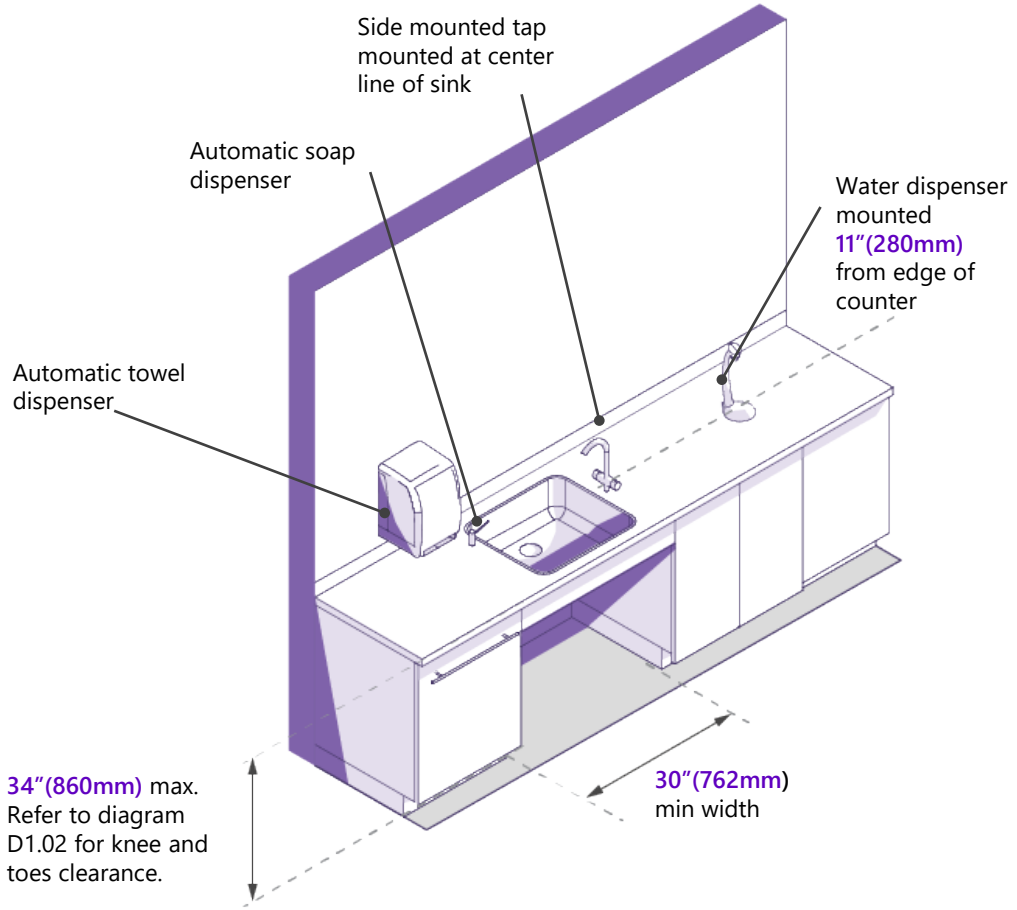
Useful diagrams

D4.03 Kitchenettes



Condiments, cups, etc. should be stored nearest to the leading edge of the counter to ensure widest range of users can reach contents.

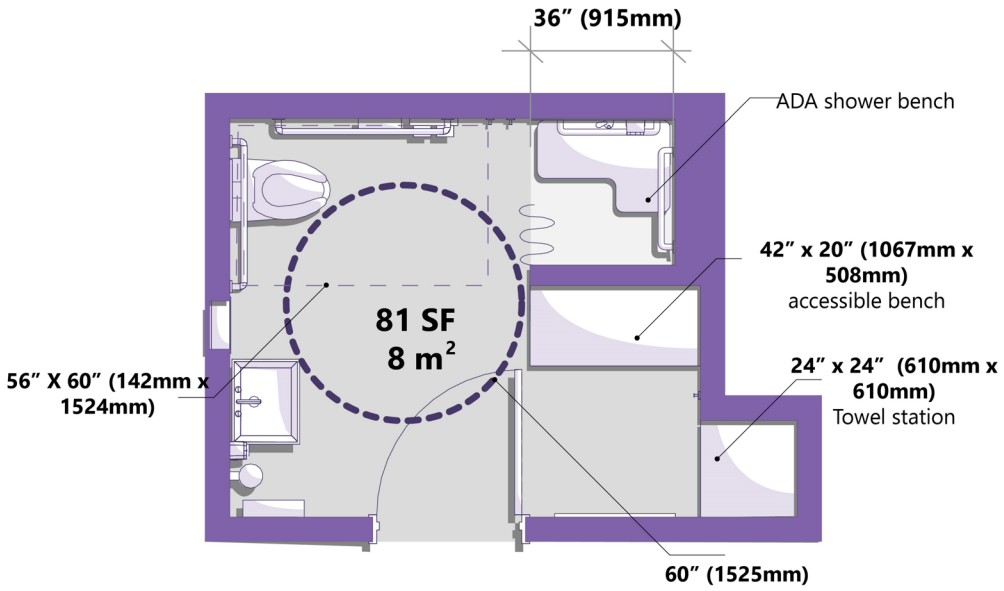
D4.04 Accessible sink



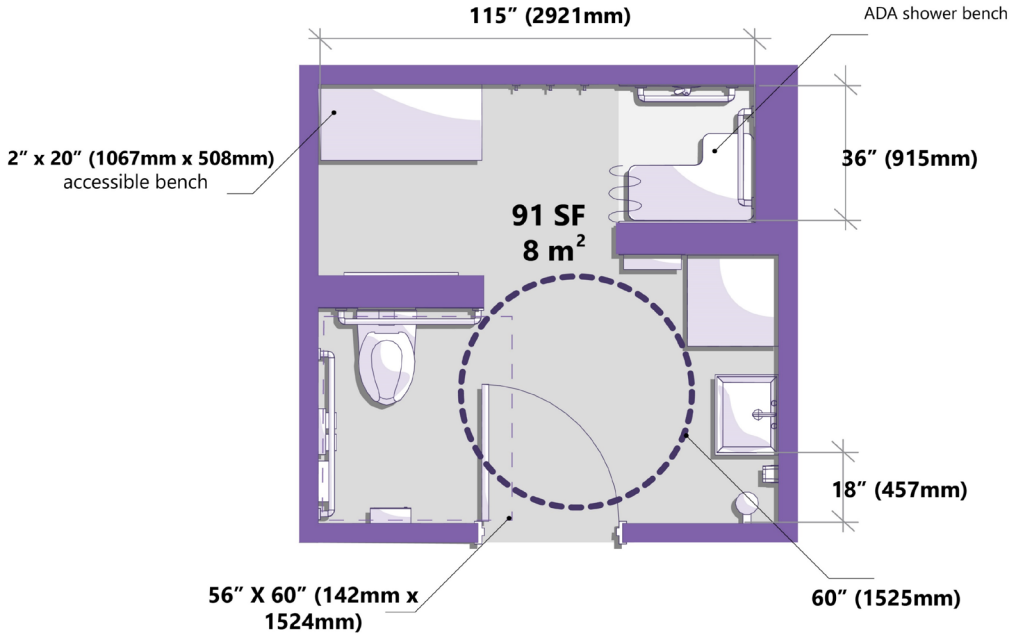
Useful diagrams

D4.05 Accessible Shower

Option A

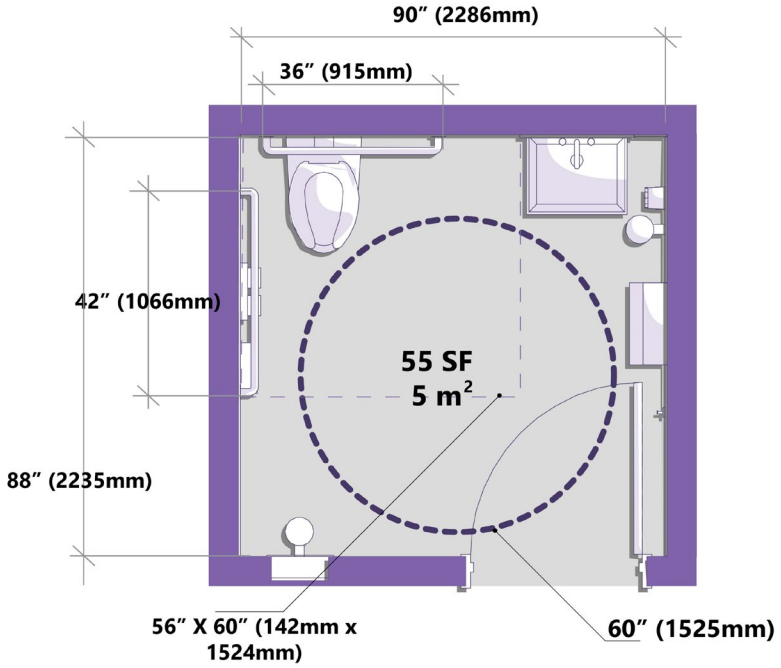


Option B

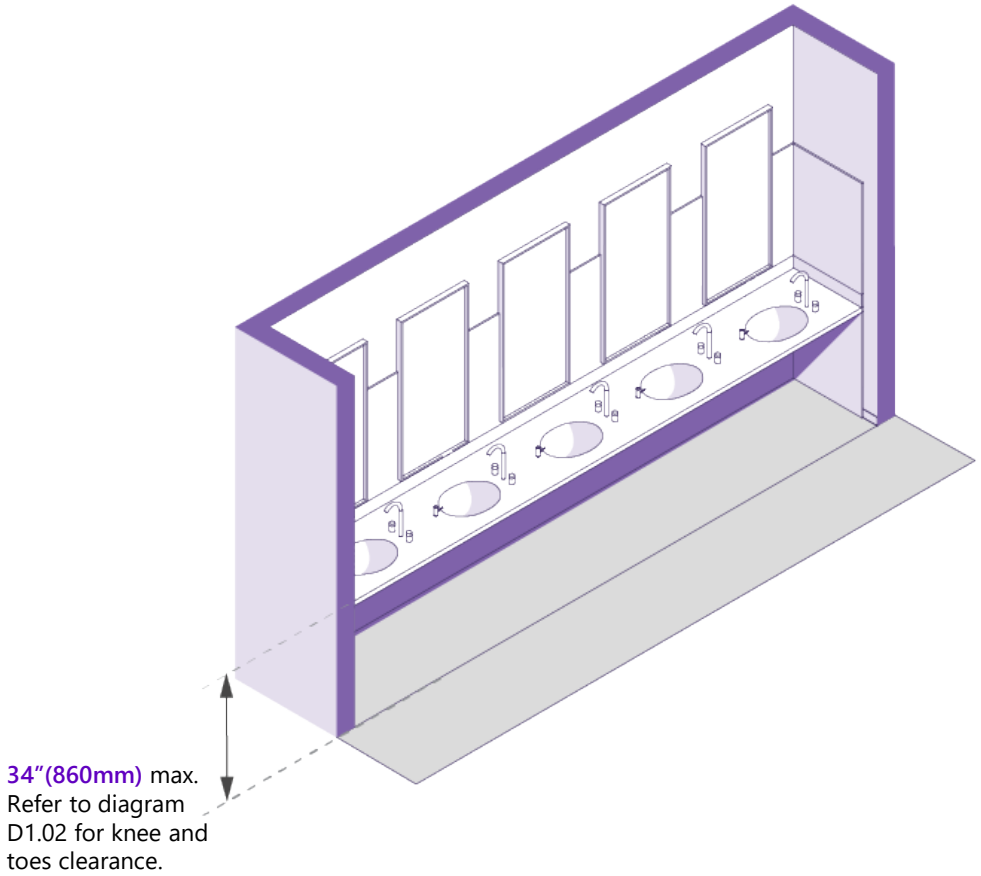


Useful diagrams

D5.01 Accessible single user restrooms



D5.02 Wheel in washbasin



34″(860mm) max. Refer to diagram D1.02 for knee and toes clearance.

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Thank you.